

Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 *et seq.*”

50. The Respondent USET receives “hazardous waste” from off-site generators, as that term is defined by 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3].

51. Hazardous wastes destined for oil reclamation are transferred to the Respondent TD*X by the Respondent USET.

52. On various dates after June 15, 2008, hazardous wastes were fed into the TDU.

53. The TDU uses heat from an indirect heated rotary dryer to separate the organic constituents from the hazardous waste feed material. A nitrogen carrier gas is used to transfer the vapor phase organic constituents to a gas treatment system. The oil is recovered by condensing vapor phase organic constituents in the gas treatment system. A portion of the TDU’s recirculating nitrogen carrier gas, along with non-condensable gases, is vented, filtered, and then injected into the combustion chamber of the TDU, where it is burned.

54. Processing (treatment) is defined in 30 T.A.C. § 335.1(122) [40 C.F.R. § 260.10] as follows:

The extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of solid waste or hazardous waste, designed to change the physical, chemical, or biological character or composition of any solid waste or hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The transfer of solid waste for reuse or disposal as used in this definition does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the executive director determines that regulation of such activity is necessary to protect human health or the environment, the definition of processing does not include activities relating to those materials exempted by the administrator of the United States Environmental Protection Agency in

accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§6901 *et seq.*, as amended.

55. Thermal processing (thermal treatment) is defined in 30 T.A.C. § 335.1(149)

[40 C.F.R. § 260.10] as follows:

the processing of solid waste or hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the solid waste or hazardous waste. Examples of thermal processing are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also “incinerator” and “open burning.”)

56. The burning of gases in the TDU’s combustion chamber constitutes thermal processing (thermal treatment) as that term is defined in 30 T.A.C. § 335.1(149) [40 C.F.R. § 260.10].

57. The combustion chamber of the TDU is an enclosed device that uses controlled flame combustion.

58. The combustion chamber of the TDU does not meet the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; nor meets the definition of infrared incinerator or plasma arc incinerator.”

59. To date, neither the Respondent USET nor Respondent TD*X has applied for nor received a RCRA permit or interim status to allow the thermal processing (thermal treatment) of hazardous waste in the combustion chamber of the TDU.

60. Therefore, the Respondent USET and the Respondent TD*X have violated and continue to violate Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e) and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)] by thermally processing (thermally treating) hazardous waste without a RCRA permit or interim status.

Count Four – Storing Hazardous Waste Without a Permit Or Interim Status

61. Pursuant to Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)], a RCRA permit or interim status is required for the processing (treatment), storage, or disposal of hazardous waste.

62. “Storage” is defined in 30 T.A.C. § 335.1(143) [40 C.F.R. § 260.10] as “the holding of solid waste for a temporary period, at the end of which the waste is processed, disposed of, recycled, or stored elsewhere.”

63. Between on or about March 9, 2010, and June 11, 2010, the Respondent USET stored roll-off boxes in the area called the “Y” at the facility.

64. The roll-off boxes identified in Paragraph 63 contained material which had entered the oil reclamation process and was being temporarily staged before undergoing subsequent stages of the reclamation process. The Respondent USET discontinued the use of the area called the “Y” for this purpose.

65. “Hazardous waste” is defined in 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3] as “any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 *et seq.*”

66. The roll-off boxes identified in Paragraph 63 contained “hazardous waste” as that term is defined in T.A.C. § 335.1(69) [40 C.F.R. § 261.3].

67. The Respondent USET had not applied for nor received a RCRA permit or interim status to allow the storage of hazardous waste at the area called the “Y”.

68. Therefore, the Respondent USET has violated Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)] by storing hazardous waste without a RCRA permit or interim status.

III. COMPLIANCE ORDER

69. Pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), the Respondents are hereby **ORDERED** to take the following actions and provide evidence of compliance within the time period specified below:

A. Interim Operating Requirements

1. As of the effective date of this CAFO, feedstock for the oil reclamation unit shall consist only of non-hazardous waste, and oil-bearing hazardous waste from petroleum refining, production, and transportation practices. Oil-bearing hazardous waste from petroleum refining, production, or transportation practices includes the following listed hazardous waste from specific Petroleum Refining Sources (K049, K050, K051, K052, K169, and K170). Also acceptable is oil-bearing hazardous waste from processes which meet the definition of the following Standard Industrial Classification (SIC) codes and corresponding North American Industry Classification System (NAICS) codes (i.e., petroleum refining, production, and transportation practices) as follows:

SIC Code	SIC Description	NAICS Code	NAICS Title
1311	Crude Petroleum & Natural Gas	211111	Crude Petroleum and Natural Gas Extraction
1321	Natural Gas Liquids	211112	Natural Gas Liquid Extraction
1381	Drilling Oil & Gas Wells	213111	Drilling Oil and Gas Wells
1382	Oil & Gas Field Exploration Services (except geophysical mapping & surveying)	213112	Support Activities for Oil & Gas Operations
1389	Oil and Gas Field Services, NEC (except construction of field gathering lines, site	213112	Support Activities for Oil and Gas Operations

	preparation and related construction activities performed on a contract or fee basis)		
2911	Petroleum Refining	324110	Petroleum Refineries
4612	Crude Petroleum Pipelines	486110	Pipeline Transportation of Crude Oil
4613	Refined Petroleum Pipelines	486910	Pipeline Transportation of Refined Petroleum Products
4789	Transportation Services, NEC (pipeline terminals and stockyards for transportation)	488999	All Other Support Activities for Transportation
4922	Natural Gas Transmission	486210	Pipeline Transportation of Natural Gas
4923	Natural Gas Transmission and Distribution (distribution)	221210	Natural Gas Distribution
4923	Natural Gas Transmission and Distribution (transmission)	486210	Pipeline Transportation of Natural Gas
5171	Petroleum Bulk Stations and Terminals (except petroleum sold via retail method)	488999	All Other Support Activities for Transportation
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (merchant wholesalers)	424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)

2. Using feedstock from processes meeting the definition of the aforementioned SIC/NAICS Codes does not constitute compliance with 40 C.F.R. § 261.6(a)(3)(iv)(C) or this CAFO. The Respondents are required to make a separate determination whether the hazardous waste in question is “oil-bearing,” and that the hazardous waste was originally generated from petroleum refining, production, or transportation practices.

3. As of the effective date of this CAFO, when the dryer feed is on, the Respondents shall operate the TDU in accordance with the interim operating parameters set forth in Appendix 1, Table A, which is attached and incorporated by reference into this CAFO. The Blending Protocols referenced in Appendix 1 is attached as Appendix 2, and incorporated by reference into this CAFO.

4. As of the effective date of this CAFO, Respondents shall comply with the Start-Up, Shutdown, and Malfunction Plan (SSM Plan) (CDT Plan, Appendix E). The Compliance Demonstration Test (CDT) Plan is attached as Appendix 3 and incorporated by reference into the CAFO.

5. Within sixty (60) days of the effective date of this CAFO, the Respondents shall conduct a tune-up of the external combustion chamber of the TDU in accordance with the following requirements:

a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown.

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specification.

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available.

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made.

Measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made.

f. Perform sampling and analysis of both dryer furnace stacks using Method TO-15, "Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)". If the total

organic matter result is greater than 10 ppmV for either stack, the analysis shall include speciation of the gas. This information shall be included in the report required in Paragraph 69.A.5.g below.

g. Maintain on-site a report documenting the concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume present, measured before and after the adjustments of the external combustion chamber of the TDU, and a description of any corrective actions taken as part of the combustion adjustment.

h. Subsequent tune-ups shall be conducted annually until the TDU is reconfigured.

6. Within sixty (60) days of the effective date of this CAFO, the Respondents shall conduct a fuel specification analysis of the purge vent gas for mercury and document that it does not exceed the maximum concentration of 40 micrograms/cubic meter of mercury using test methods ASTM D5954, ASTM D6350, ISO 6978-1:2003(E), or ISO 6978-2:2003(E), or an alternate test method approved by EPA. If the concentration of mercury exceeds 40 micrograms/cubic meter, the Respondents shall immediately notify EPA.

7. Within ninety (90) days of the effective date of this CAFO, the Respondents shall install, monitor, and operate an automatic hazardous waste feed cutoff (AWFCO) at the TDU in accordance with 40 C.F.R. § 63.1206(c)(3)(ii) and (iv) that immediately and automatically cuts off the hazardous waste feed when any component of the AWFCO system fails, or when one or more of the interim operating parameters set forth in Appendix 1, Table A that are designated as AWFCO parameters are not met. The Respondents shall also comply with the investigation, recordkeeping, testing, and reporting requirements of 40 C.F.R. § 63.1206(c)(3)(v), (vi) and (vii).

8. Within one year of the effective date of this CAFO, the Respondents shall reconfigure the TDU so that the non-condensable vent gases are routed to a thermal oxidizing unit (TOU)

instead of the combustion chamber of the TDU (Reconfigured TDU). After reconfiguration, fuel for the TDU is limited to natural gas and propane.

9. The Respondents shall operate the Reconfigured TDU during the shakedown period in accordance with the operating parameters limits set forth in Appendix 1, Table B when the dryer feed is on. The Respondent shall not operate the Reconfigured TDU more than 720 hours (including the shakedown period and the Compliance Demonstration Test). The Respondents shall keep records of the hours of operation during the shakedown period. The Respondents shall operate a continuous emissions monitor system (CEMS) for carbon monoxide (CO) for the TOU during the shakedown period. The Respondents shall operate the Reconfigured TOU in a manner that the hourly rolling averages for CO are not exceeded. The rolling averages shall be calculated in accordance with 40 C.F.R. §§ 63.1209(a)(6) and 63.1209(b)(5).

10. During the shakedown period, the Respondents shall monitor and operate an automatic hazardous waste feed cutoff (AWFCO) at the Reconfigured TDU in accordance with 40 C.F.R. § 63.1206(c)(ii) and (iv) that immediately and automatically cuts off the hazardous waste feed when any component of the AWFCO system fails, or when one or more of the operating parameter limits set forth in Appendix 1, Table B that are designated as AWFCO parameters are not met. The Respondents shall also comply with the investigation, recordkeeping, testing, and reporting requirements of 40 C.F.R. § 63.1206(c)(3) (v), (vi) and (vii).

11. The Respondents shall conduct a test measuring the concentration of CO in the exhaust gases from the TOU. This test shall include three one-hour runs during which the TDU is operated on oil-bearing hazardous waste. The emissions from the TOU stack shall be monitored for carbon monoxide and oxygen using EPA Method 10. The emissions shall be

demonstrated to be less than 100 ppmV CO corrected to 7% O₂ in each run. The test frequency shall be once during each six-month period, January 1 – June 30 and July 1 - December 31, said time period to commence after conducting the CDT and continuing until the TCEQ issues a RCRA Subpart X permit for the Reconfigured TDU. Within forty-five (45) days after conducting the test, the Respondents shall submit a test report to EPA summarizing the test results. The time periods for conducting the test may be changed to once during each twelve (12) month calendar period, January 1 - December 31, if the Respondents submit to EPA, with a copy to TCEQ, a detailed feed stream analysis plan that characterizes the waste received by the facility, and EPA approves the plan. The detailed feedstream analysis plan shall be prepared in accordance with 40 C.F.R. § 264.13 and the EPA Guidance Document “Waste Analysis At Facilities That Generate, Treat, Store, And Dispose of Hazardous Waste”, OSWER 9938.4-03 (April 1994). The Respondents will implement the detailed feedstream analysis plan, as approved or modified by EPA, immediately upon receipt of EPA’s approval.

12. The Respondents shall prepare a report for the time period beginning on the effective date of this CAFO and ending June 30, 2013, and every six (6) months thereafter. The report shall be submitted to EPA, with a copy to TCEQ, within thirty (30) days of the end of the reporting period. The report shall include the following:

a. For each waste stream accepted by the oil reclamation unit, identify the customer, original generator, waste stream description, RCRA waste codes, the SIC or NAICS code of the process generating the waste, a summary of any analyses conducted by the Respondents to verify the waste stream profiles, and the total volume of waste accepted during the reporting period. If requested by EPA, the Respondents shall provide copies of relevant waste approval documents and manifests for the specific waste streams.

b. All time periods in which there were exceedances of the operating parameters and the AWFCO requirements set forth in Appendix 1, Tables A and B, and exceedances of the hourly rolling averages for CO (Paragraph 69.A.9).

c. All exceedances of the Reconfigured TDU Compliance Standards and the AWFCO requirements established in accordance with Paragraph 69.C.9.

d. The initial Report shall include documentation showing that the tune-up and fuel specification analysis required by Paragraphs 69.A.5 and 69.A.6 have been conducted, and provide documentation showing the date of installation and subsequent operation of the AWFCO system required by Paragraphs 69.A.7.

e. Documentation showing the installation of the TOU required by Paragraph 69.A.8, and the additional AWFCO requirements required by Appendix 1, Table B (Paragraph 69.A.10).

The Report may be submitted in an electronic format (i.e., compact disk). The Respondents may claim the report as confidential business information (CBI), in accordance with the requirements of 40 C.F.R. Part 2. However, information that is emissions data or a standard or limitation cannot be claimed as CBI. 40 C.F.R. § 2.301(e). If the Report contains any information that is claimed CBI, the Respondents shall provide a redacted version with all CBI deleted.

B. RCRA Permit Modification

1. Within one year of the effective date of this CAFO, the Respondents shall submit to TCEQ, with a copy to EPA, an application for a Class 3 RCRA Permit Modification to permit the Reconfigured TDU as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X in accordance with 30 T.A.C. § 335.152(a)(16) [40 C.F.R. Part 264, Subpart X], 30 T.A.C. Chapter 305 [40 C.F.R. §§ 270.10 – 270.14, 270.19, 270.23, and 270.30 – 270.33].

2. The permit application shall also include relevant requirements of 40 C.F.R. Part 264, Subparts I through O and AA through CC, 40 C.F.R. Part 270, and 40 C.F.R. Part 63, Subpart EEE that are appropriate for the operation of the Reconfigured TDU, including an engineering report, waste analysis, monitoring and inspection requirements, and closure requirements set forth in 30 T.A.C. § 335.152(a)(13) [40 C.F.R. §§ 264.341, 264.347, and 264.351].

3. The Respondents shall also request that the issued RCRA permit modification include the following:

- a. The feedstock limitations applicable to the operation of the oil reclamation unit under 40 C.F.R. § 261.6(a)(3)(iv)(C) set forth in Paragraph 69.D;
- b. The investigation, recordkeeping, testing, and reporting requirements of 40 C.F.R. § 63.1206(c)(3) (v), (vi) and (vii);
- c. Appropriate recordkeeping and reporting requirements; and
- d. Any applicable risk-based terms and conditions necessary to protect human health and the environment.

4. The failure to timely submit a Class 3 Permit Modification to TCEQ and EPA within the deadline set forth in Paragraph 69.B.1 shall result in the termination of the Respondents' authorization to operate the Reconfigured TDU on that date unless that deadline has been extended pursuant to Section IV.F (Force Majeure).

5. By no later than three and one-half years (42 months) from the effective date of this CAFO, the Respondents must complete all permitting requirements and obtain issuance from the TCEQ of a final RCRA Subpart X permit for the TDU as a Subpart X – Miscellaneous Unit in accordance with 30 T.A.C. § 335.152(a)(16) [40 C.F.R. Part 264, Subpart X], 30 T.A.C. Chapter 305 [40 C.F.R. §§ 270.10 – 270.14, 270.19, 270.23, and 270.30 – 270.33], and which

incorporates the appropriate requirements of 40 C.F.R. Part 264, Subparts I through O and AA through CC, 40 C.F.R. Part 270, and 40 C.F.R. Part 63, Subpart EEE. In the event that TCEQ does not issue a RCRA Subpart X permit for the Reconfigured TDU as described above by the above deadline, the Respondents' authorization to operate the Reconfigured TDU terminates on that date, unless that deadline has been extended pursuant to Section IV.F (Force Majeure).

C. Compliance Demonstration Test

1. The Respondents shall perform a compliance demonstration test (CDT) in accordance with the approved CDT Plan, which is attached as Appendix C and incorporated by reference into the CAFO. The CDT requires the Respondents to demonstrate compliance with the emissions limits of 40 C.F.R. § 63.1219(b) set forth in Paragraph C.5, the destruction and removal efficiency standard of 40 C.F.R. § 63.1219(c)(1) set forth in Paragraph C.4, and establish limits for the operating parameters set forth in Paragraph 69.C.6 (Appendix 1, Table C).

2. Within sixty (60) days of the effective date of this CAFO, the Respondents shall submit to EPA for approval, with a copy to TCEQ, a Quality Assurance Project Plan (QAPP) for the CDT. The QAPP shall be prepared in accordance with the EPA Region 6 Guidance "Quick Reference Guide, Test Burn Program Planning for Hazardous Waste Combustion (HWC) Units" dated August 6, 2012. The Respondents shall implement the QAPP as approved or modified by EPA.

3. The Respondents shall implement the CDT in accordance with Appendix 3 within ninety (90) days after reconfiguration of the TDU pursuant to Paragraph 69.A.8 of this CAFO.

4. During the CDT, the Respondents must achieve a destruction and removal efficiency (DRE) of 99.99% for toluene, the designated principle organic hazardous constituent (POHC). The DRE shall be calculated in accordance with 40 C.F.R. § 63.1219(c)(1).

5. The emission limits that must be met during the CDT are set forth in 40 C.F.R. § 63.1219(b).
6. The operating parameters limits that will be established during the CDT are set forth in Appendix 1, Table C.
7. The Respondents must not exceed the emission limits set forth in 40 C.F.R. § 63.1219(b), and must achieve a DRE of 99.99% for toluene [as set forth in 40 C.F.R. § 63.1219(c)] for all three runs in order to have a successful CDT. If the Respondents determine, based on the results of analyses of stack samples, that they have exceeded any emission standard or failed to meet the DRE requirement during any of the three runs, they must immediately cease processing hazardous waste in the Reconfigured TDU. The Respondents must make this determination within forty-five (45) days following completion of the CDT. The Respondents may not resume operation of the Reconfigured TDU until the Respondents have submitted and received EPA approval of a revised CDT plan, at which time operations can resume to demonstrate compliance with the emission limits and DRE requirements during all of the three runs.
8. All analyses required by the CDT plan shall be performed by a NELAC accredited laboratory or by a laboratory pre-approved by TCEQ.
9. Within ninety (90) days from completion of the CDT, the Respondents shall submit a CDT Report to EPA and TCEQ prepared in accordance with requirements in the CDT Plan, documenting compliance with the DRE standard and emission limits set forth in Paragraphs 69.C.4 and 69.C.5, and identifying operating parameter limits and AWFCO settings for the parameters set forth in Appendix 1, Table C. The DRE standard, emission limits, operating parameter limits, and the AWFCO settings shall also be set forth in a separate Appendix entitled

“Reconfigured TDU Compliance Standards”. All data collected during the CDT (including, but not limited to, field logs, chain-of-custody documentation, monitoring data, sampling and analytical results, and any other data or calculations supporting the emissions calculations or operating parameter limits) must be submitted to EPA and TCEQ as part of the CDT Report. However, information in the CDT Report that is emissions data or a standard or limitation cannot be claimed as CBI. 40 C.F.R. § 2.301(e). If the Report contains any information that is claimed CBI, the Respondents shall provide a redacted version with all CBI deleted.

10. As of the date of the submission of the CDT Report, the Respondent shall comply with all operating requirements set forth in the “Reconfigured TDU Compliance Standards”, unless otherwise notified by EPA.

11. EPA will review the CDT Report. EPA will make a finding concerning compliance with the emissions standards, DRE requirements, and other requirements of the CDT. If EPA determines that the Respondents have met all the requirements, it shall issue a Finding of Compliance to the Respondents. If EPA determines that the Respondents did not meet all of the requirements, it shall issue a Finding of Non-Compliance. Subject to Paragraph 69.C.7 of this CAFO, the issuance of a Finding of Non-Compliance by EPA shall result in the termination of the Respondents’ authorization to operate the Reconfigured TDU on that date.

12. The failure to timely submit a CDT Report to EPA and TCEQ within ninety (90) days from completion of the CDT shall result in the termination of the Respondents’ authorization to operate the Reconfigured TDU on that date, unless that deadline has been extended pursuant to Section IV.F (Force Majeure).

D. Compliance with 40 C.F.R. § 261.6(a)(3)(iv)(C)

1. Unless the TDU and the tanks identified in Paragraph 20 are authorized by the RCRA Permit Modification required by Section III.B of this CAFO (or any subsequent permit amendment) to receive wastes that do not meet the requirements set forth in 40 C.F.R.

§ 261.6(a)(3)(iv)(C), feedstock for the oil reclamation unit shall consist only of non-hazardous waste, and oil-bearing hazardous waste from petroleum refining, production, and transportation practices. Oil-bearing hazardous waste from petroleum refining, production, or transportation practices includes the following listed hazardous waste from specific Petroleum Refining Sources (K049, K050, K051, K052, K169, and K170). Also acceptable is oil-bearing hazardous waste from processes which meet the definition of the following Standard Industrial Classification (SIC) codes and corresponding North American Industry Classification System (NAICS) codes (i.e., petroleum refining, production, and transportation practices) as follows:

SIC Code	SIC Description	NAICS Code	NAICS Title
1311	Crude Petroleum & Natural Gas	211111	Crude Petroleum and Natural Gas Extraction
1321	Natural Gas Liquids	211112	Natural Gas Liquid Extraction
1381	Drilling Oil & Gas Wells	213111	Drilling Oil and Gas Wells
1382	Oil & Gas Field Exploration Services (except geophysical mapping & surveying)	213112	Support Activities for Oil & Gas Operations
1389	Oil and Gas Field Services, NEC (except construction of field gathering lines, site preparation and related construction activities performed on a contract or fee basis)	213112	Support Activities for Oil and Gas Operations
2911	Petroleum Refining	324110	Petroleum Refineries
4612	Crude Petroleum Pipelines	486110	Pipeline Transportation of Crude Oil
4613	Refined Petroleum Pipelines	486910	Pipeline Transportation of Refined Petroleum Products

4789	Transportation Services, NEC (pipeline terminals and stockyards for transportation)	488999	All Other Support Activities for Transportation
4922	Natural Gas Transmission	486210	Pipeline Transportation of Natural Gas
4923	Natural Gas Transmission and Distribution (distribution)	221210	Natural Gas Distribution
4923	Natural Gas Transmission and Distribution (transmission)	486210	Pipeline Transportation of Natural Gas
5171	Petroleum Bulk Stations and Terminals (except petroleum sold via retail method)	488999	All Other Support Activities for Transportation
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (merchant wholesalers)	424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)

Nothing in this Section III.D shall be construed to preclude Respondents from seeking authorization from the TCEQ to process oil-bearing materials outside the scope of 40 C.F.R. § 261.6(a)(3)(iv)(C). However, the definition of oil-bearing hazardous waste from petroleum refining, production, or transportation practices set forth in this Paragraph shall remain the same.

2. Using feedstock from processes meeting the definition of the aforementioned SIC/NAICS Codes does not constitute compliance with 40 C.F.R. § 261.6(a)(3)(iv)(C) or this CAFO. The Respondents are required to make a separate determination whether the hazardous waste in question is “oil-bearing,” and that the hazardous waste was originally generated from petroleum refining, production, or transportation practices. The Respondents shall request that this provision be placed in the issued RCRA permit as applicable to the oil reclamation unit operation under 40 C.F.R. § 261.6(a)(3)(iv)(C).

E. TCEQ Submission, Revision, and Approval Process

1. For the Class 3 RCRA Permit Modification required be submitted to TCEQ for approval under this CAFO, TCEQ will review the application in accordance with 30 T.A.C.

§§ 281.3(c), 281.18 and 281.19(a) and (b). The Respondents must respond to any Notice of Deficiency (NOD), with a copy to EPA, within the time period specified by the TCEQ. In the event that the Respondents fail to submit a timely and complete NOD response, the Respondents' authorization to operate the TDU shall terminate on the NOD response deadline unless that deadline has been extended pursuant to Section IV.F (Force Majeure).

F. Additional Conditions

1. To comply with this CAFO, the Respondents must obtain a RCRA permit for the TDU as a Subpart X – Miscellaneous Unit in accordance with 30 T.A.C. § 335.152(a)(16) [40 C.F.R. Part 264, Subpart X], 30 T.A.C. Chapter 305 [40 C.F.R. §§ 270.10 – 270.14, 270.19, 270.23, and 270.30 – 270.33], and which incorporates the appropriate requirements of 40 C.F.R. Part 264, Subparts I through O and AA through CC, and 40 C.F.R. Part 270, and 40 C.F.R. Part 63, Subpart EEE.

2. The Respondents may seek relief under the provisions of Section IV.F of this CAFO (Force Majeure) for any delay in the performance of any such obligations resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if the Respondent has submitted a timely and complete application and has taken all other actions necessary to obtain such permit or approval.

G. EPA Review and Comment on RCRA Permit

1. Nothing in this CAFO shall limit EPA's rights under applicable environmental laws or regulations, including, but not limited to, Section 3005(c)(3) of RCRA, 42 U.S.C. § 6925(c)(3), 40 C.F.R. § 270.32 and 40 C.F.R. § 271.19, to review, comment, and incorporate appropriate requirements of 40 C.F.R. Parts 264, Subparts I through O and Subparts AA through CC, and

40 C.F.R. Part 63, Subpart EEE directly into the permit or establish other permit conditions that are based on those parts; or take action under Section 3008(a)(3) of RCRA, 42 U.S.C.

§ 6928(a)(3), against the Respondents on the ground that the RCRA permit for the Reconfigured TDU does not comply with a condition that the EPA Region 6 Regional Administrator in commenting on the permit application or draft permit stated was necessary to implement approved State program requirements, whether or not that condition was included in the issued permit. If the Respondent disputes an action taken by EPA pursuant to 40 C.F.R. § 270.32 or 40 C.F.R. § 271.19, the Defendant may invoke Dispute Resolution in accordance with Section IV.E of this CAFO.

H. Submissions

In all instances in which this Compliance Order requires written submissions to EPA and TCEQ, each submission must be accompanied by the following certification:

“I certify under penalty of law to the best of my knowledge and belief, that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

All submissions must be certified on behalf of the Respondent(s) by the signature of a person authorized to sign a permit application or a report under 40 C.F.R. § 270.11.

I. Monitoring, Recordkeeping, and Record Retention Requirements

1. Upon the effective date of this CAFO, all interim operating parameters (Appendix 1, Table A), shakedown operating parameters (Appendix 1, Table B), and final operating parameters limits (Appendix 1, Table C and Paragraph 69.C.6) subject to AWFCO limits shall be monitored by the facility's Continuous Process Monitoring System (CPMS), which records data once per minute in an electronic data log (DLG). In addition, the Respondents shall keep copies

of all documents relating to compliance with the operating parameters limits not monitored by the CPMS, and all other documents relating to compliance with Section III of this CAFO. All records, including electronic records, shall be kept for a period of one year after termination of the CAFO. These monitoring and recordkeeping requirements are in addition to any other monitoring and/or recordkeeping requirements required by federal, state, or local laws, regulations, or permits. This information shall be made available to EPA and TCEQ upon request.

2. In addition, the Respondents shall preserve, for a period of one year after termination of the CAFO, all records and documents in its possession or in the possession of its divisions, employees, agents, contractors, or successors which in any way relate to this CAFO regardless of any document retention policy to the contrary. This information shall be made available to EPA and TCEQ upon request.

J. EPA Approval of Submissions

EPA will review the plans set forth in Paragraphs 69.A.11 (if applicable) and 69.C.2, and notify the Respondents in writing of EPA's approval or disapproval of the plan or any part thereof. Within the time specified, the Respondents shall address the deficiencies and submit a revised plan. EPA will approve, disapprove, or modify the revised submittal. EPA approved plans shall be incorporated by reference into this CAFO.

IV. TERMS OF SETTLEMENT

A. CIVIL PENALTY

70. Pursuant to the authority granted in Section 3008 of RCRA, 42 U.S.C. § 6928, and upon consideration of the entire record herein, including the Findings of Fact and Conclusions of Law, which are hereby adopted and made a part hereof, and upon consideration of the

seriousness of the alleged violations, the Respondents' good faith efforts to comply with the applicable regulations, and the June 2003 RCRA Civil Penalty Policy, it is hereby **ORDERED** that the Respondent U.S. Ecology Texas, Inc. be assessed a civil penalty of **ONE HUNDRED SIXTY-FIVE THOUSAND, SIX HUNDRED FIFTY-SEVEN DOLLARS (\$165,657)**, and the Respondent TD*X Associates L.P. be assessed a civil penalty of **SIX HUNDRED TWENTY-TWO THOUSAND, FOUR HUNDRED SIXTY-THREE DOLLARS (\$622,463)**. The Respondent USET shall pay the assessed civil penalty within thirty (30) days of the effective date of this CAFO. The Respondent TD*X Associates L.P. shall pay the assessed civil penalty in four (4) payments as follows:

Payment No. 1: \$157,978.35 within thirty (30) days of the effective date of this CAFO.

Payment No. 2: \$157,978.35 (\$153,268.99 civil penalty plus interest of \$4,709.36) within one year of the effective date of this CAFO.

Payment No. 3: \$157,978.35 (\$154,822.97 civil penalty plus interest of \$3,155.38) within two years of the effective date of this CAFO.

Payment No. 4: \$157,978.34 (\$156,392.69 civil penalty plus interest of \$1,585.65) within three years of the effective date of this CAFO.

71. The Respondents shall pay the assessed civil penalty by certified check, cashier's check, or wire transfer, made payable to "Treasurer, United States of America, EPA - Region 6". Payment shall be remitted in one of three (3) ways: regular U.S. Postal mail (including certified mail), overnight mail, or wire transfer. For regular U.S. Postal mail, U.S. Postal Service certified mail, or U.S. Postal Service express mail, the check(s) should be remitted to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-9000

For overnight mail (non-U.S. Postal Service, e.g. Fed Ex), the check(s) should be
remitted to:

U.S. Bank
Government Lockbox 979077
US EPA Fines & Penalties
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, MO 63101
Phone No. (314) 418-1028

For wire transfer, the payment should be remitted to:

Federal Reserve Bank of New York
ABA: 021030004
Account No. 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message should read
"D 68010727 Environmental Protection Agency"

PLEASE NOTE: Docket numbers RCRA-06-2012-0936 (Respondent USET) and RCRA-06-2012-0937 (Respondent TD*X) shall be clearly typed on the respective checks to ensure proper credit. If payment is made by check, the check shall also be accompanied by a transmittal letter and shall reference the Respondent's name and address, the case name, and docket number of the CAFO. If payment is made by wire transfer, the wire transfer instructions shall reference the Respondent's name and address, the case name, and docket number of the CAFO. The Respondents shall also send a simultaneous notice of such payment, including a copy of the check and transmittal letter, or wire transfer instructions to the following:

Chief, Compliance Enforcement Section (6EN-HE)
Hazardous Waste Enforcement Branch
U.S. EPA, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Lorena Vaughn
Regional Hearing Clerk (6RC-D)
U.S. EPA, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

The Respondents' adherence to this request will ensure proper credit is given when penalties are received in the Region.

72. The Respondents agree not to claim or attempt to claim a federal income tax deduction or credit covering all or any part of the civil penalty paid to the United States Treasurer.

73. Pursuant to 31 U.S.C. § 3717 and 40 C.F.R. § 13.11, unless otherwise prohibited by law, EPA will assess interest and late payment penalties on outstanding debts owed to the United States and a charge to cover the costs of processing and handling a delinquent claim. Interest on the civil penalty assessed in this CAFO will begin to accrue thirty (30) days after the effective date of the CAFO and will be recovered by EPA on any amount of the civil penalty that is not paid by the respective due date. Interest will be assessed at the rate of the United States Treasury tax and loan rate in accordance with 40 C.F.R. § 13.11(a). Moreover, the costs of the Agency's administrative handling of overdue debts will be charged and assessed monthly throughout the period the debt is overdue. *See* 40 C.F.R. § 13.11(b).

74. EPA will also assess a \$15.00 administrative handling charge for administrative costs on unpaid penalties for the first thirty (30) day period after the payment is due and an additional \$15.00 for each subsequent thirty (30) day period that the penalty remains unpaid. In addition, a

penalty charge of up to six percent per year will be assessed monthly on any portion of the debt which remains delinquent more than ninety (90) days. *See* 40 C.F.R. § 13.11(c). Should a penalty charge on the debt be required, it shall accrue from the first day payment is delinquent. *See* 31 C.F.R. § 901.9(d). Other penalties for failure to make a payment may also apply.

B. PARTIES BOUND

75. The provisions of this CAFO shall apply to and be binding upon the parties to this action, their officers, directors, agents, employees, successors, and assigns. The undersigned representative of each party to this CAFO certifies that he or she is fully authorized by the party whom he or she represents to enter into the terms and conditions of this CAFO and to execute and to legally bind that party to it.

C. ADDITIONAL REQUIREMENTS

76. The Respondents shall undertake the following additional requirements:

A. The Respondents agree that the oil reclamation unit and the TDU are subject to the requirements of 40 C.F.R. Part 61, Subpart FF.

B. Within thirty (30) days of the effective date of the CAFO, the Respondents shall submit to EPA a certification that the following equipment in the oil reclamation unit and the TDU is not in “volatile hazardous air pollutant” (VHAP) service, as that term is defined by 40 C.F.R. § 61.241:

1. pumps;
2. compressors;
3. pressure relief devices;
4. sampling connection systems;
5. open-ended valves or lines;

6. valves;
7. connectors;
8. surge control vessels;
9. bottoms receivers; and
10. control devices and systems.

This certification shall be submitted in accordance with Paragraphs 76.H and 76.I.

C. Pursuant to 40 C.F.R. § 61.354(c), as of the effective date of this CAFO, the Respondents shall install, calibrate, maintain, and operate according to manufacturer's specifications, devices to continuously monitor the control devices operations required by 40 C.F.R. § 61.349.

D. Pursuant to 40 C.F.R. § 61.345(a), within 180 days of the effective date of the CAFO, the Respondents shall install, operate, and maintain covers on Bins 1, 2, 3, 4, and the Centrifuge solid bins that meet the requirements of 40 C.F.R. § 61.345(a)(1). The cover and openings shall be in a closed, sealed position at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection or sampling, as required by 40 C.F.R. § 61.345(a)(1)(ii). The Respondents shall monitor the cover and all openings for no detectable emissions initially and thereafter at least once per year by the methods specified in 40 C.F.R. § 61.355(h).

E. The Respondents shall use a submerged fill pipe when transferring waste into the containers by pumping, as required by 40 C.F.R. § 61.345(a)(2).

F. Within ninety (90) days after the reconfiguration of the TDU pursuant to Paragraph 69.A.8 of this CAFO, the Respondents shall conduct performance tests for the TOU and the carbon adsorption system to demonstrate compliance with the requirements of 40 C.F.R.

§ 61.349. The performance tests shall be conducted in accordance with the requirements of 40 C.F.R. § 61.355. A copy of the performance test results shall be submitted to EPA within ninety (90) days of completion of the performance tests. The performance tests results shall be submitted in accordance with Paragraphs 76.H and 76.I.

G. Within 210 days of the effective date of the CAFO, the Respondents shall submit a written report to EPA showing compliance with Paragraphs 76.C, 76.D, and 76.E.

H. The certification and report identified in this Section must be accompanied by the following certification:

“I certify under penalty of law to the best of my knowledge and belief, that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

All submissions must be certified on behalf of the Respondent(s) by the signature of a person authorized to sign a permit application or a report under 40 C.F.R. § 270.11.

I. The certification and report required under this Section shall be sent to the following:

Craig Lutz
Toxics Enforcement Section (6EN-AT)
Compliance Assurance and Enforcement Division
U.S. EPA, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

D. STIPULATED PENALTIES

77. In addition to any other remedies or sanctions available to EPA, the Respondent(s) shall pay stipulated penalties in the following amounts for each day during which each failure or refusal to comply continues:

a. Failure to Timely Submit Reports or Plans - Paragraphs 69.A.11, 69.A.12, and 69.C.2

<u>Period of Noncompliance</u>	<u>Penalty Per Violation Per Day</u>
1st through 15th day	\$ 1,000
16th through 30th day	\$ 1,500
31st day and beyond	\$ 2,500

b. Failure to Comply with Certain Interim Operating Requirements – Paragraphs 69.A.5, 69.A.6, 69.A.7 (installation of AWFCO only), 69A.8, and 69.A.11

<u>Period of Noncompliance</u>	<u>Penalty Per Violation Per Day</u>
1st through 15th day	\$ 1,500
16th through 30th day	\$ 2,500
31st day and beyond	\$ 5,000

c. Failure to Comply with any Other Provision of Section III of this CAFO

<u>Period of Noncompliance</u>	<u>Penalty Per Violation Per Day</u>
1st through 15th day	\$ 500
16th through 30th day	\$ 1,000
31st day and beyond	\$ 1,500

d. Failure to Comply with Additional Requirements – Section IV.C

<u>Period of Noncompliance</u>	<u>Penalty Per Violation Per Day</u>
1st through 15th day	\$ 1,500
16th through 30th day	\$ 2,500
31st day and beyond	\$ 5,000

Penalties shall accrue from the date of the noncompliance until the date the violation is corrected, as determined by EPA.

78. The Respondent(s) shall pay stipulated penalties not more than fifteen (15) days after receipt of written demand by EPA for such penalties. Method of payment shall be in accordance with the provisions of Paragraph 71 herein. Interest and late charges shall be paid as stated in Paragraphs 73 - 74 herein.

79. Nothing in this agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of the Respondent(s) violation of this CAFO or of the statutes and regulations upon which this agreement is based, or for the Respondent's violation of any applicable provision of law.

E. DISPUTE RESOLUTION

80. If the Respondents object to any decision or directive of EPA in regard to Section III or IV.C, the Respondents shall notify each other and the following persons in writing of its objections, and the basis for those objections, within thirty (30) calendar days of receipt of EPA's decision or directive:

Associate Director
Hazardous Waste Enforcement Branch (6EN-H)
Compliance Assurance and Enforcement Division
U.S. EPA - Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Chief, RCRA Enforcement Branch (6RC-ER)
Office of Regional Counsel
U.S. EPA - Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

81. The Associate Director of the Hazardous Waste Enforcement Branch or his/her designee (Associate Director), and the Respondents shall then have an additional thirty (30) calendar days from EPA's receipt of the Respondents' written objections to attempt to resolve the dispute. If an agreement is reached between the Associate Director and the Respondents, the agreement shall be reduced to writing and signed by the Associate Director and the Respondents and incorporated by reference into this CAFO.

82. If no agreement is reached between the Associate Director and the Respondents within that time period, the dispute shall be submitted to the Director of the Compliance

Assurance and Enforcement Division or his/her designee (Division Director). The Division Director and the Respondents shall then have a second 30-day period to resolve the dispute. If an agreement is reached between the Division Director and the Respondents, the resolution shall be reduced to writing and signed by the Division Director and the Respondents and incorporated by reference into this CAFO. If the Division Director and the Respondents are unable to reach agreement within this second 30-day period, the Division Director shall provide a written statement of EPA's decision to the Respondents, which shall be binding upon the Respondents and incorporated by reference into the CAFO.

83. If the Dispute Resolution process results in a modification of this CAFO, the modified CAFO must be approved by the Regional Judicial Officer and filed pursuant to Section IV.H (Modifications).

84. The invocation of dispute resolution procedures under this Section shall not extend, postpone, or affect in any way, any obligations of the Respondents under this CAFO, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first day of noncompliance, but payment shall be stayed pending resolution of the dispute. If the Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IV.D.

F. FORCE MAJEURE

85. A "force majeure event" is any event beyond the control of the Respondents, their contractors, or any entity controlled by the Respondents that delays the performance of any obligation under this CAFO despite the Respondents' best efforts to fulfill the obligation. "Best efforts" includes anticipating any potential force majeure event and addressing the effects of any such event (a) as it is occurring and (b) after it has occurred, to prevent or minimize any resulting

delay to the greatest extent possible. "Force Majeure" does not include the Respondents' financial inability to perform any obligation under this CAFO, but does include any delays attributable to the TCEQ's permitting process and the conduct of the contested case hearing.

86. The Respondents shall provide notice orally or by electronic or facsimile transmission as soon as possible, but not later than 72 hours after the time the Respondents first knew of, or by the exercise of due diligence, reasonably should have known of, a claimed force majeure event. The Respondents shall also provide written notice, as provided in Section IV.G of this CAFO, within seven days of the time the Respondents first knew of, or by the exercise of due diligence, reasonably should have known of, the event. The notice shall state the anticipated duration of any delay; its cause(s); the Respondents' past and proposed actions to prevent or minimize any delay; a schedule for carrying out those actions; and the Respondents' rationale for attributing any delay to a force majeure event. Failure to give such notice shall preclude the Respondents from asserting any claim of force majeure.

87. The Respondent also shall provide notice orally or by electronic or facsimile transmission to the other Respondent not later than 24 hours after the time Respondent first knew of, or by the exercise of due diligence, reasonably should have known of, a claimed force majeure event, provided that the failure to give such notice shall not limit either Respondent's responsibilities under this CAFO.

88. If the Complainant agrees that a force majeure event has occurred, the Complainant may agree to extend the time for the Respondents to perform the affected requirements for the time necessary to complete those obligations. An extension of time to perform the obligations affected by a force majeure event shall not, by itself, extend the time to perform any other

obligation. Where the Complainant agrees to an extension of time, the appropriate modification shall be made pursuant to Section IV.H of this CAFO.

89. If the Complainant does not agree that a force majeure event has occurred, or does not agree to the extension of time sought by the Respondents, the Complainant's position shall be binding, unless the Respondents invokes Dispute Resolution under Section IV.D of this CAFO. In any such dispute, the Respondents bear the burden of proving, by a preponderance of the evidence, that each claimed force majeure event is a force majeure event; that the Respondents gave the notice required by the paragraph above, that the force majeure event caused any delay the Respondents' claimed was attributable to that event; and that the Respondents exercised their reasonable best efforts to prevent or minimize any delay caused by the event. If the Respondents carry this burden, the delay at issue shall be deemed not to be a violation of the affected obligation of this CAFO.

G. NOTIFICATION

90. Unless otherwise specified elsewhere in this CAFO, whenever notice is required to be given, whenever a report or other document is required to be forwarded by one party to another, or whenever a submission or demonstration is required to be made, it shall be directed to the individuals specified below at the addresses given (in addition to any action specified by law or regulation), unless these individuals or their successors give notice in writing to the other parties that another individual has been designated to receive the communication:

Complainant:

Chief, Compliance Enforcement Section (6EN-HE)
Hazardous Waste Enforcement Branch
U.S. EPA, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Respondent U.S. Ecology Texas, Inc.:

Mary Reagan
McGinnis, Lochridge & Kilgore, L.L.P.
600 Congress Avenue
Suite 2100
Austin, Texas 78701

Respondent TD*X Associates, L.P.:

J.D. Head
Fritz, Bryne, Head & Harrison, PLLC
98 San Jacinto Boulevard
Suite 2000
Austin, TX 78701

Texas Commission on Environmental Quality

Section Manager
Industrial and Hazardous Permits Section
Waste Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087 MC 130
Austin, TX 78711

H. MODIFICATION

91. The terms, conditions, and compliance requirements of this CAFO may not be modified or amended except as otherwise specified in this CAFO, or upon the written agreement of the Complainant and Respondent(s), and approved by the Regional Judicial Officer, and such modification or amendment being filed with the Regional Hearing Clerk.

I. RETENTION OF ENFORCEMENT RIGHTS

92. EPA does not waive any rights or remedies available to EPA for any other violations by the Respondents of Federal or State laws, regulations, or permitting conditions.

93. Except as herein provided, nothing in this CAFO shall limit the power and authority of EPA or the United States to take, direct, or order all actions to protect public health, welfare, or the environment, or prevent, abate or minimize an actual or threatened release of hazardous

substances, pollutants, contaminants, hazardous substances on, at or from the Respondent USET's facility or Respondent TD*X's oil reclamation unit and related equipment.

Furthermore, nothing in this CAFO shall be construed or to prevent or limit EPA's civil and criminal authorities, or that of other Federal, State, or local agencies or departments to obtain penalties or injunctive relief under other Federal, State, or local laws or regulations.

94. The Complainant reserves all legal and equitable remedies available to enforce the provisions of this CAFO. This CAFO shall not be construed to limit the rights of the EPA or United States to obtain penalties or injunctive relief under RCRA or under other federal or state laws, regulations, or permit conditions.

95. In any subsequent administrative or judicial proceeding initiated by the Complainant or the United States for injunctive relief, civil penalties, or other appropriate relief relating to this Facility or the oil reclamation unit, the Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the Complainant or the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to this CAFO.

96. This CAFO is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. The Respondents are responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits. The Respondents' compliance with this CAFO shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The Complainant does not warrant or aver in any manner that the Respondents' compliance with any aspect of this

CAFO will result in compliance with provisions of the RCRA or with any other provisions of federal, State, or local laws, regulations, or permits.

J. INDEMNIFICATION OF EPA

97. Neither EPA nor the United States Government shall be liable for any injuries or damages to person or property resulting from the acts or omissions of the Respondents, their officers, directors, employees, agents, receivers, trustees, successors, assigns, or contractors in carrying out the activities required by this CAFO, nor shall EPA or the United States Government be held out as a party to any contract entered into by the Respondents in carrying out the activities required by this CAFO.

K. COSTS

98. Each party shall bear its own costs and attorney's fees. Furthermore, each Respondent specifically waives its right to seek reimbursement of its costs and attorney's fees under 5 U.S.C. § 504 and 40 C.F.R. Part 17.

L. TERMINATION

99. At such time as the Respondents believe they have completed all of the requirements of this CAFO, they may request that EPA concur whether all of the requirements of this CAFO have been satisfied. Such request shall be in writing and shall provide the necessary documentation to establish whether there has been full compliance with the terms and conditions of this CAFO. EPA will respond to said request in writing within ninety (90) days of receipt of the request. This CAFO shall terminate when all actions required to be taken by this CAFO have been completed, and the Respondents have been notified by the EPA in writing that this CAFO has been satisfied and terminated.

M. EFFECTIVE DATE


100. This CAFO, and any subsequent modifications, become effective upon filing with the Regional Hearing Clerk.

THE UNDERSIGNED PARTIES CONSENT TO THE ENTRY OF THIS CONSENT AGREEMENT AND FINAL ORDER:

FOR THE RESPONDENT:

Date:

9/27/12


US Ecology Texas, Inc.

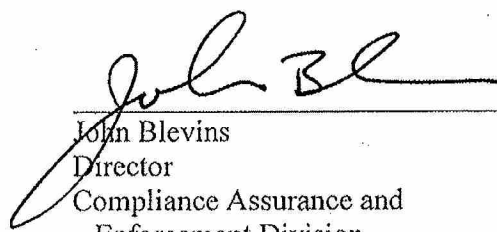
FOR THE RESPONDENT:

Date: September 26, 2012

Carl R. Palmer
TD*X Associates L.P.

FOR THE COMPLAINANT:

Date: 10.03.12

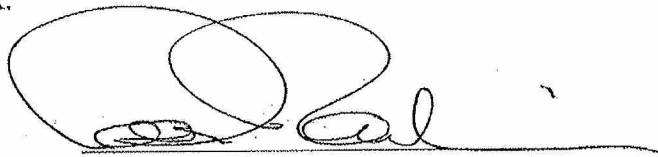


John Blevins
Director
Compliance Assurance and
Enforcement Division

FINAL ORDER

Pursuant to the Section 3008 of RCRA, 42 U.S.C. § 6928, and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, 40 C.F.R. Part 22, the foregoing Consent Agreement is hereby ratified. This Final Order shall not in any case affect the right of EPA or the United States to pursue appropriate injunctive relief or other equitable relief for criminal sanctions for any violations of law. This Final Order shall resolve only those causes of action alleged herein. Nothing in this Final Order shall be construed to waive, extinguish or otherwise affect the Respondents' (or their officers, agents, servants, employees, successors, or assigns) obligation to comply with all applicable federal, state, and local statutes and regulations, including the regulations that were the subject of this action. The Respondents are ordered to comply with the Compliance Order and terms of settlement as set forth in the Consent Agreement. Pursuant to 40 C.F.R. § 22.31(b), this Final Order shall become effective upon filing with the Regional Hearing Clerk.

Date: 10/4/12

A handwritten signature in black ink, appearing to read 'Patrick Rankin', is written over a horizontal line.

Patrick Rankin
Regional Judicial Officer

APPENDIX 1 – OPERATING PARAMETERS

TABLE A

TDU OIL RECLAMATION SYSTEM INTERIM REQUIREMENTS PRIOR TO TDU INSTALLATION

Tag No.	Equipment Operating Parameter	Operating Parameter Limit	Compliance Basis
TT-18/19	TDU Dryer, Minimum Combustion Chamber Temperature	Maintain Temperature > 1,400°F	AWFCO: CPMS ¹ , 60-sec time delay
PT-1	TDU Dryer, Maximum Internal Pressure	Maintain Pressure < 0.00" W.C.	AWFCO: CPMS, 6-min Rolling Average (RA) ²
OE-1	Purge Vent Gas Stream Maximum O ₂ Concentration	O ₂ < 7%	AWFCO: CPMS, 60-sec time delay
FE-101	Maximum Purge Vent Rate	Purge Vent Rate < 180 scfm	AWFCO: CPMS, Hourly Rolling Average (HRA) ³
M-100	Minimum Percent Excess Air, Operation of Purge Vent Injector Air Supply	Purge Vent Air Supply > 20% Excess Air	AWFCO: CPMS, Tuning of Combustion Airflow
TE-28	Maximum Condenser System Exhaust Temperature	Temperature < 120°F	AWFCO: CPMS, HRA
	HEPA Filter Installed and Pressure Change Monitored to Ensure Integrity of Filter	Installed and Δ Pressure Monitoring	Installation Check; Δ Pressure Monitored Once Per Shift
	Maximum TDU Feed Mercury Concentration	[Hg] < 50 ppm/Bin	Blending Protocols & Documentation ⁴
	Maximum TDU Feed Organic Halide Concentration	[Total Organic Halides] < 1,500 ppm/Bin	Blending Protocols & Documentation

¹ Continuous Process Monitoring System – See Paragraph 69.1 of CAFO.² Previous six 1-minute readings are summed and divided by six.³ 40 C.F.R. §§ 63.1209(b)(5).⁴ See Paragraph 69.A.3 of the CAFO.

TABLE B

TDU OIL RECLAMATION SYSTEM REQUIREMENTS AFTER TDU INSTALLATION
PRE-COMPLIANCE DEMONSTRATION TEST OPERATIONS

Tag No.	Equipment Operating Parameter	Shakedown (Pre-Test) OPL	Compliance Basis
PT-1	TDU Dryer, Maximum Internal Pressure	Maintain Pressure < 0.00" W.C.	AWFCO: CPMS ⁵ , 6-min RA ⁶
M-05	TDU Dryer, Cylinder Rotation On	Motor Operating	AWFCO: CPMS, Instantaneous
M-18	Product Discharge System	Motor Operating	AWFCO: CPMS, Instantaneous
M-21	Recirculation Blower Operating	Motor Operating	AWFCO: CPMS, Instantaneous
TT-121	TOU, Minimum Combustion Chamber Temperature	Maintain Temperature > 1,400°F	AWFCO: CPMS, HRA ⁷
KY-110	TOU, Minimum Residence Time (Calculated from Purge Vent Flow Rate, Exhaust T, and Air Ratio)	Residence Time > 0.5 seconds	AWFCO: CPMS, HRA
AE-5/ OE-5	TOU Exhaust Gas, Maximum CO Concentration	[CO] < 100 ppmV @ 7% O ₂	AWFCO: CEMS for CO, HRA
OE-1	Purge Vent Gas Stream, Maximum O ₂ Concentration	[O ₂] < 7%	AWFCO: CPMS, Instantaneous
FE-101	Maximum Purge Vent Rate	Vent Flow < 250 scfm	AWFCO: CPMS, HRA
FCV-102	Valve Position to Ensure Purge Vent is not Directed Away from TOU	Valve Closed	AWFCO: CPMS, 60-sec delay
M-121	Minimum Percent Excess Air, Operation of Purge Vent Injector Air Supply	Purge Vent Air Supply > 20% Excess Air	AWFCO: CPMS, Tuning of Combustion Airflow
TE-28	Maximum Condenser System Exhaust Temperature	Maintain Temperature < 120°F	AWFCO: CPMS, HRA

⁵ Continuous Process Monitoring System – See Paragraph 69.1 of the CAFO.

⁶ Previous six 1-minute readings are summed and divided by six.

⁷ 40 C.F.R. §§ 63.1209(a)(6) and 63.1209(b)(5).

	HEPA Filter Installed and Pressure Change Monitored to Ensure Integrity of Filter	Installed and Δ Pressure Monitoring	Installation Check; Δ Pressure Monitored Once Per Shift
	Maximum TDU Feed Mercury Concentration	[Hg] < 50 ppm/Bin	Blending Protocols & Documentation ⁸ , Feed Stream Analysis Plan (if applicable) ⁹
	Maximum TDU Feed Organic Halide Concentration	[Total Organic Halides] < 1,500 ppm/Bin	Blending Protocols & Documentation, Feed Stream Analysis Plan (if applicable)
	Maximum TDU Feed Semi-Volatile Metals Concentration ¹⁰	N/A	Blending Protocols & Documentation, Feed Stream Analysis Plan (if applicable)
	Maximum TDU Feed Low-Volatile Metals Concentration ¹¹	N/A	Blending Protocols & Documentation, Feed Stream Analysis Plan (if applicable)

⁸ See Paragraph 69.A.3 of the CAFO.

⁹ See Paragraph 69.A.11 of the CAFO.

¹⁰ Semi-volatile metals means a combination of cadmium and lead.

¹¹ Low-volatile metals means a combination of Arsenic, Beryllium, and Chromium.

TABLE C
TDU OIL RECLAMATION REQUIREMENTS AFTER TDU INSTALLATION
POST-COMPLIANCE DEMONSTRATION TEST OPERATIONS

Tag No.	Equipment Operating Parameter	Interim/Final (Post-Test) OPL	Compliance Basis
PT-1	TDU Dryer, Maximum Internal Pressure	Maintain Pressure < 0.00" W.C.	AWFCO: CPMS ¹² , 6-min RA ¹³
M-05	TDU Dryer, Cylinder Rotation On	Motor Operating	AWFCO: CPMS, Instantaneous
M-18	Product Discharge System	Motor Operating	AWFCO: CPMS, Instantaneous
M-21	Recirculation Blower Operating	Motor Operating	AWFCO: CPMS, Instantaneous
TT-121	TOU, Minimum Combustion Chamber Temperature	OPL Established @ > 3-Run Average from CDT	AWFCO: CPMS, HRA ¹⁴
KY-110	TOU, Minimum Residence Time (Calculated from Purge Vent Flow Rate, Exhaust T, and Air Ratio)	Residence Time > 0.5 seconds	AWFCO: CPMS, HRA
AE-5/ OE-5	TOU Exhaust Gas, Maximum CO Concentration	Semi-Annual Testing until Waste Analysis Plan Approved, then Annual Testing	Performance Testing in lieu of CEMS; Waste Analysis Plan based with other OPLs
OE-1	Purge Vent Gas Stream, Maximum O ₂ Concentration	[O ₂] < 7%	AWFCO: CPMS, Instantaneous
FE-101	Maximum Purge Vent Rate	Vent Flow < 250 scfm	AWFCO: CPMS, HRA
FCV-102	Valve Position to Ensure Purge Vent is not Directed Away from TOU	Valve Closed	AWFCO: CPMS, 60-sec time delay
M-121	Minimum Percent Excess Air, Operation of Purge Vent Injector Air Supply	Purge Vent Air Supply > 20% Excess Air	AWFCO: CPMS, Tuning of Combustion Airflow

¹² Continuous Process Monitoring System – See Paragraph 69.I of CAFO.

¹³ Previous six 1-minute readings are summed and divided by six.

¹⁴ 40 C.F.R. §§ 63.1209(a)(6) and 63.1209(b)(5).

TE-28	Maximum Condenser System Exhaust Temperature	OPL Established @ < 3-run Average Based on CDT	AWFCO: CPMs, HRA
	HEPA Filter Installed and Pressure Change Monitored to Ensure Integrity of Filter	Installed and Δ Pressure Monitoring	Installation Check; Δ Pressure Monitored Once Per Shift
	Maximum TDU Feed Mercury Concentration	[Hg] < 50 ppm/Bin	Blending Protocols & Documentation, ¹⁵ Feed Stream Analysis Plan (if applicable) ¹⁶
	Maximum TDU Feed Organic Halide Concentration	OPL Established as Measured Ratio ¹⁷	Blending Protocols & Documentation, Feed Stream Analysis Plan (if applicable)
	Maximum TDU Feed Semi-Volatile Metals Concentration ¹⁸	OPL Established as Measured Ratio ¹⁹	Blending Protocols & Documentation, Feed Stream Analysis Plan (if applicable)
	Maximum TDU Feed Low-Volatile Metals Concentration ²⁰	OPL Established as Measured Ratio ²¹	Blending Protocols & Documentation, Feed Stream Analysis Plan (if applicable)

¹⁵ See Paragraph 69.A.3 of the CAFO.

¹⁶ See Paragraph 69.A.11 of the CAFO.

¹⁷ Maximum TDU Feed Concentration established as a measured ratio (not to exceed 4000 ppm/bin) from emissions data collected during CDT. See plan example calculations.

¹⁸ Semi-volatile metals means a combination of cadmium and lead.

¹⁹ Maximum TDU Feed Concentration established as measured ration from emissions data collected during CDT. See plan example calculations.

²⁰ Low-volatile metals means a combination of Arsenic, Beryllium, and Chromium.

²¹ Maximum TDU Feed Concentration established as measured ratio from emissions data collected during CDT. See plan example calculations.

CERTIFICATE OF SERVICE

I hereby certify that on the 4th day of October, 2012, the original and one copy of the foregoing Consent Agreement and Final Order (CAFO) was hand delivered to the Regional Hearing Clerk, U.S. EPA - Region 6, 1445 Ross Avenue, Dallas, Texas 75202-2733, and that true and correct copies of the CAFO were sent to the following by the method indicated below:

For US Ecology Texas, Inc.

Certified Mail – Return Receipt Requested – 7007 0710 0002 1385 1491

Mary Reagan
McGinnis, Lochridge & Kilgore, L.L.P.
600 Congress Avenue, Suite 2100
Austin, Texas 78701

For TD*X Associates LP

Certified Mail – Return Receipt Requested – 7007 0710 0002 1385 1507

J.D. Head
Fritz, Bryne, Head & Harrison, PLLC
98 San Jacinto Boulevard
Suite 2000
Austin, TX 78701

Evan L Pearson

Appendix B
to
Addendum to the Technical Support Document (ATSD)

Tradebe Treatment and Recycling, LLC

Significant Source Modification No. 089-34432-00345

Significant Permit Modification No. 089-34503-00345

IDEM letter to Pollution Control Industries
(1 page)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

July 18, 2002

Ms. Tita LaGrimas
Director of Regulatory Affairs
Pollution Control Industries
4343 Kennedy Avenue,
East Chicago, IN 46312

Dear Ms. LaGrimas:

Re: Indirect Thermal Desorbition Unit

This is in response to your letter of June 11, 2002 regarding the regulatory status of an indirect thermal desorbition unit you are proposing to utilize to reclaim hydrocarbons from non-liquid hazardous waste. These hydrocarbons will then be sold for utilization in the manufacture of lubricants. As we understand it, you are seeking concurrence that the unit is exempt from the need for a permit under the hazardous waste rules pursuant to the recycling process exclusion at 40 CFR 261.6 (c) (1).

Provided that the unit is used only for the reclamation of components of hazardous waste that will be legitimately utilized either directly or as ingredients in manufacturing other products you are correct in your understanding that the unit would not require a hazardous waste permit. Other uses to which this unit could be utilized; for example, to meet treatment standards for subsequent disposal, or for production of hazardous waste fuels would negate this exclusion.

If you have any questions please contact me at 317-308-3341.

Sincerely,

A handwritten signature in black ink that reads "Dave Berrey".

Dave Berrey
Senior Environmental Manager I
Technical Compliance Section
Office of Land Quality

Appendix C
to
Addendum to the Technical Support Document (ATSD)

Tradebe Treatment and Recycling, LLC

Significant Source Modification No. 089-34432-00345

Significant Permit Modification No. 089-34503-00345

IDEM letter to David Case of the Environmental Technology Council (ETC)
(3 pages)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

March 31, 2006

Mr. David R. Case
Executive Director
Environmental Technology Council
734 15th Street, N.W. Suite 750
Washington, DC 20005

Dear Mr. Case:

Re: Hazardous Waste Recycling

This is in response to your letter of March 13, 2006 regarding the recycling activities of Pollution Control Industries (PCI), specifically in relation to the unit described as the Solids Distillation System (SDS). I appreciate the opportunity to respond to your concerns. You are correct in your understanding that PCI claims a recycling exemption from hazardous waste permitting requirements for the SDS.

The stated purpose of your letter is to inquire whether PCI has demonstrated to the Indiana Department of Environmental Management (IDEM) or the United States Environmental Protection Agency (EPA), Region 5, that the SDS meets the sham recycling criteria established by the EPA. This type of demonstration is commonly known as a legitimate recycling determination. The issue is whether the activity is considered recycling or some form of treatment being called recycling in order to evade environmental regulation.

From a regulatory perspective, this agency considers the SDS unit to be no different than any other reclamation unit. The unit is designed to process solids for the purpose of recovering the petroleum hydrocarbon component. The recovered petroleum hydrocarbon is currently sold as a degreasing agent.

Two waste streams are generated in this process, a still bottom and a carbon char. Presently these waste streams are being managed and disposed of as listed hazardous waste. PCI is investigating possible uses of the carbon char in a manner that it would qualify for the reuse exclusions found at 40 CFR 261.2(e). When, and if, they find a use that they consider legitimate, IDEM will review their proposal for regulatory legitimacy, as is the usual practice.

As you indicated in your letter, the legitimate recycling criteria guidance has been available since 1985. This guidance was reorganized and rewritten for clarity and was proposed as a rule on October 28, 2003. This rule has never been finalized.

You make the statement that PCI is required to demonstrate to the regulatory agencies that the SDS meets the sham recycling criteria in order to qualify for the recycling exclusion. In the preamble to the proposed rulemaking EPA stated that "if the criteria were finalized as rule, it would continue to be used in the same way as current guidance is used. That is, we would expect the regulated community to continue to evaluate their recycling operations and reach their own conclusions. Such conclusions would of course be subject to review by EPA or the authorized state." (68 FR 61583)

IDEM has used the existing guidance in the spirit intended for this guidance since 1985. This spirit is expressed by EPA in the 2003 proposed rule preamble as follows: "a legitimacy determination involves evaluating site-specific information to determine whether or not a secondary material being recycled, is in effect being used as a commodity rather than a waste." The memorandum also explained that "each recycling scenario is likely to require case-specific evaluation." The memorandum further explained that "depending on case-specific facts and circumstances, certain criteria may weigh more heavily than others in making legitimacy determinations."

EPA also stated that "not all legitimate recycling will conform to each of the four criteria, and that some subjective evaluation and balancing will be required. Where more specific regulatory criteria or requirements have been established in regulations, affected parties should look to those regulatory provisions in addition to the generic criteria proposed in today's rule." (68 FR 61582) The State of Indiana has adopted more specific criteria for recycling scenarios involving use of secondary materials as manufacturing ingredients (329 IAC 3.1-6-5). Indiana regulation does not have legitimacy criteria in the rules for reclaim and reuse scenarios.

PCI met with IDEM hazardous waste program staff prior to the construction of the SDS unit. IDEM stressed that the unit could only be used to recover materials that were legitimately reused either as a manufacturing ingredient or directly as a product. If the unit was used to produce fuels or merely for treatment, the unit would require a hazardous waste treatment permit.

PCI is aware that the unit must be used to process only materials that contain recoverable quantities of petroleum hydrocarbon. IDEM compliance inspectors monitor incoming materials as a routine part of PCI's regular inspections. EPA Region 5 staff has also evaluated the SDS unit during joint inspections with IDEM. To this date we have not observed any activities indicative of sham recycling.

Your letter poses a number of very specific questions. The language of the letter implies that the answers are simple and straightforward. Unfortunately, this is not the case. From the time that the legitimate recycling guidance first made its debut in 1985, the criteria have been intensely debated. Even if the general idea of the criteria is accepted there is little consensus among government regulators on the application of the criteria. The criteria are by their nature subjective and will remain so even if they are finalized as rule. In their current form as guidance it is even more problematic to enforce these concepts in the fashion reflected in your letter.

I appreciate your questions and will further consider them as IDEM continues to monitor PCI's recycling activities. Should IDEM suspect a sham application, staff will use their best judgment under relevant laws, rules, and guidance. Regarding your question on the use of the carbon char as a replacement for coke, I have no information that would lead me to believe this is being contemplated. PCI recently informally indicated they were looking at an entirely different use for the char in the steel industry. If they pursue the reuse they are considering, IDEM will evaluate their proposal.

You have asked IDEM to confirm that all "materials" received by PCI for processing in the SDS are manifested and stored as hazardous waste under RCRA. This request is not consistent with regulatory requirements. The hazardous waste rules contain exemptions for certain types of materials being reclaimed. For example, characteristic sludges, characteristic by-products and commercial chemical products that are reclaimed are not solid waste, therefore can not be regulated as hazardous waste (40 CFR 261.2). PCI may also receive conditionally-exempt small quantity generator hazardous waste, household hazardous waste, and non-hazardous solid waste without a manifest. IDEM has not observed any regulated hazardous waste arriving at the facility without a manifest. For those wastes not regulated as hazardous waste, inspectors still look for compliance with solid waste rules, segregation of incompatibles, permit conditions and other applicable requirements.

If you have any questions or would like to discuss further, please contact Dave Berrey in our Office of Land Quality at 317-308-3341 or toll free at 800-451-6027. Mr. Berrey serves as IDEM's primary contact on issues related to the legitimate recycling of hazardous waste. For issues related to hazardous waste permitting, please contact Thomas Linson in our Office of Land Quality at 317-232-3292 or tlinson@idem.IN.gov.

Sincerely,



Thomas W. Easterly
Commissioner

cc: Stephen Johnson, Administrator, U.S. EPA
Thomas Skinner, Administrator, U.S. EPA Region 5
Margaret Guerriero, Director, Waste, Pesticides and Toxics Division
Matt Hale, Director, Office of Solid Waste

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Part 70
Significant Source Modification and Significant Permit Modification

Source Description and Location

Source Name:	Tradebe Treatment and Recycling, LLC
Source Location:	4343 Kennedy Avenue, East Chicago, IN 46312
County:	Lake
SIC Code:	4953 (Refuse Systems)
Operation Permit No.:	T 089-29424-00345
Operation Permit Issuance Date:	February 25, 2011
Significant Source Modification No.:	089-34432-00345
Significant Permit Modification No.:	089-34503-00345
Permit Reviewer:	Heath Hartley

Existing Approvals

The source was issued Part 70 Operating Permit No. T 089-29424-00345 on February 25, 2011. The source has since received the following approvals:

- (a) Administrative Amendment No. 089-32233-00345, issued on August 29, 2012.
- (b) Administrative Amendment No. 089-33257-00345, issued on June 20, 2013.
- (c) Minor Source Modification No. 089-34241-00345, issued on June 13, 2014.
- (d) Minor Permit Modification No. 089-34282-00345, issued on August 7, 2014.

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O ₃	40 CFR 81.315 as amended by 77 FR 34228. ^{1,2}
PM _{2.5}	Attainment effective February 6, 2012, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

¹Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005.

²The department has filed a legal challenge to U.S. EPA's designation in 77 FR 34228.

- (a) **Ozone Standards**
U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake as nonattainment for ozone. On August 1, 2012, the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against U.S. EPA in the U.S. Court of Appeals for the DC Circuit on July 19, 2012. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x

emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO_x emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.

- (b) **PM_{2.5}**
Lake County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**
Lake County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)*
PM	80.4
PM ₁₀	79.2
PM _{2.5}	79.2
SO ₂	negl.
NO _x	6.5
VOC	66.8
CO	5.5
Total HAPs	68.9

*This table is based on PTE After Issuance table in Minor Permit Modification 089-34282-00345.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.
- (c) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).
- (d) These emissions are based upon Part 70 Operating Permit No. T 089-29424-00345, Administrative Amendment No. 089-32233-00345, Administrative Amendment No. 089-33257-00345 and Minor Permit Modification No. 089-34282-00345.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Tradebe Treatment and Recycling, LLC on April 15, 2014, relating to the installation of a new Solids Distillation System (SDS II). The SDS process is a method of extracting organics from organic solid hazardous waste and

collecting the organics as fuels or reusable products. The following is a list of the proposed emission units and pollution control devices:

(m) One (1) Solids Distillation System, identified as SDS II, approved in 2015 for construction, with a maximum throughput rate of 5.0 tons of waste per hour, consisting of:

- (1) One (1) SDS Shredder and feed conveyor, identified as SDS Shredder II, with a processing capacity of 5.0 tons per hour, vented to a carbon adsorption system for VOC control (C37), exhausting to stack SDS II 01.
- (2) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU II, with a maximum capacity of 32 MMBtu/hr, using natural gas, no control, exhausting to stack SDS II 02.

Under 40 CFR 63, Subpart DDDDD, the ATDU II is considered an affected facility.

- (3) One (1) Vapor Recovery Unit, identified as VRU II, using a John Zink open flare (FL1) for control of non-condensable gases and a carbon adsorption system for backup VOC control (C38), exhausting to stack SDS 07.
- (4) One (1) solids handling system, identified as SHS, vented to a baghouse for particulate control (BH3), with VOC/HAP emissions, exhausting to stack SDS II 04.
- (5) One (1) Oil-Water Separator, identified as F-01, with a maximum of 22,000 gal, and one interceptor tank identified as F-02 with a maximum of 3,700 gal, associated with the VRU II, venting to a carbon adsorption system for VOC control (C39), exhausting to stack SDS II 03.
- (6) Four (4) tanks, identified as Tank 81 through 84, each with a maximum of 12,000 gal, used to store liquid products venting to a common carbon adsorption system for VOC control (C40), exhausting to stack SDS II 08.
- (7) One (1) tank, identified as Tank 85 used to store process water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C41), exhausting to stack SDS II 07.
- (8) One (1) tank, identified as Tank 86 used to store process water/light sludge water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C42), exhausting to stack SDS II 06.
- (9) One (1) tank, identified as Tank 87 used to store oil/solvent, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C43), exhausting to stack SDS II 06.
- (10) One (1) insignificant cooling tower, identified as SDS II 13.

Under 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

- (n) One (1) diesel-fired emergency generator, approved in 2015 for construction, with a maximum capacity of 896 horsepower, exhausting to stack G.

Under 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ, this unit is considered an affected facility.

In addition, Tradebe is proposing to increase the capacity of the existing Pot Still from 70 gallons per hour to 115 gallons per hour as follows with deleted language as ~~strike throughs~~ and new language in **bold**:

- (i) One (1) Pot Still, constructed in 2007 **and modified in 2015**, with a maximum throughput rate of ~~70~~**115** gallons of liquid waste per hour, controlled by a carbon adsorption system (C33), and exhausting to stack SDS 10.

Enforcement Issues

IDEM is aware of the following:

- Although the existing unit SDS VRU was permitted in 2004, the PTE calculations were not included and calculated appropriately.
- In addition, several federal rules that are applicable to the existing facilities at this source were not previously identified as applicable federal rules and are now being incorporated into the permit
- The existing Unit 2 previously listed a capacity of 7,200 gallons per hour. A review of this unit shows that the capacity of the receiving and shipping operation is higher.

IDEM is reviewing these matters and will take the appropriate action.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Increase in PTE Before Controls of the Modification	
Pollutant	Potential To Emit (ton/yr)
PM	331.5
PM ₁₀	331.7
PM _{2.5}	331.5
SO ₂	17.2
NO _x	25.3
VOC	4,692
CO	1,688
Hexane	1,809
Total HAPs	1,831

Note: These values reflect the emissions of the new units only. There have been PTE corrections to existing units that are not shown here.

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

This source modification is subject to 326 IAC 2-7-10.5(g)(4) and (g)(6) (significant source modification) because it has the potential to emit PM, PM10 and VOC greater than 25 tons per year and because it has the potential to emit a combination of HAPs of greater than 25 tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d)(1), because it requires a case-by-case determination of an emission limitation.

Permit Level Determination – PSD or Emission Offset

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source/permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	Potential to Emit of the Entire Source After Issuance of Modification (ton/yr)								
	PM	PM ₁₀	PM _{2.5} *	SO ₂	NO _x	VOC	CO	Single HAP	Total HAPs
HWF Storage	0	0	0	0	0	8.9	0	8.9	8.9
HWF Ship Unit 2R**	0	0	0	0	0	59.3 < 21.3	0	23.1	59.3 23.1
Unit 2S**	0	0	0	0	0	< 21.3	0	23.1	23.1
Unit 24	0	0	0	0	0	2.2	0	2.2	2.2
Lab Pack	0.6	0.6	0.6	0	0	2.5	0	2.5	2.5
Degassing**	0	0	0	0	0	4.0 17.0	0	0.3	0.06 0.3
SDS Shredder	0	0	0	0	0	0.1***	0	2.6	2.6
SDS Shaker and conveyor**	77.7	77.7	77.7	0	0	0.7***	0	0	0
SDS-ATDU	0	0	0	0	0		0	0	14.8
SDS-ATDU from NG Combustion*	0.1	0.3 0.5	0.3 0.5	0.03 0.04	4.4 6.8		3.7 5.7	0.1	0.1
VRU**	0	0	0	0	0	< 23.4	8.6	904.3	904.3
Flare FL1 (from VRU)**	0	0	0	8.1	5.2		28.5	12.6 HCl	13.4
Distillation	0	0	0	0	0	0.06***	0	2.3	2.3
Tank 52-55	0	0	0	0	0	0.5	0	0.5	0.5
Tank 57-67	0	0	0	0	0	1.9	0	1.9	1.9
Pot Still	0	0	0	0	0	0.54 2	0	0.5	0.5
Thin Film Evap	0.02	0.1	0.1	0.01	1.1	0.1	0.9	0.02	0.02
Heater	0.02	0.1	0.1	0.01	1.1	0.1	0.9	0.02	0.02
Fugitive	1.9	0.4	0.4	0	0	0	0	0	0
2015 Modification									
SDS Shredder II	0	0	0	0	0	< 95.6	0	0	7.1
SDS ATDU II	0.3	1.0	1.0	0.1	13.7		11.5	0.2	0.3
SDS VRU II	0	0	0	0	0		17.6	1808.6 Hexane	1808.6
Flare FL1 (from VRU II)	0	0	0	16.2	10.5		57.0	13.1 HCl	14.0
SHS	82.8	82.8	82.8	0	0		0	0	0
Tanks 81-87	0	0	0	0	0		0	1.3	1.3
F-01 and F-02	0	0	0	0	0		0	0.1	0.1
Cooling Tower	0.7	0	0	0	0		0	0	0
Emergency Generator	0.2	0.1	0.1	0.9	5.4	0.2	1.2	negl.	negl.
Subtotal for 2015 Modification	83.9	84.1	83.9	17.2	29.6	< 100	87.4	1808.9	1831.4
Total PTE of Entire Source	80.4 164.3	79.2 163.5	79.2 163.3	0.05 25.3	6.5 43.8	66.8 < 199.9	5.5 132.0	2713.3 Hexane	68.9 2817.1
PSD Major Source Thresholds	250	250	250	250	NA	NA	250	--	25
Emission Offset Major Source Thresholds	NA	NA	NA	NA	100	100	NA	NA	NA

*PM_{2.5} listed is direct PM_{2.5}.

**Existing units previously limited under the limit for the SDS; calculations were corrected and/or emissions are now included.

***This unit is limited by 326 IAC 2-3 (Emission Offset).

+Calculations are only for natural gas combustion only. Calculations for the natural gas heater were corrected.

++HWF Ship has been separated into Receiving (Unit 2R) and Shipping (Unit 2S)

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this MSOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process / Emission Unit	Potential to Emit of the Entire Source After Issuance of Modification (ton/yr)								
	PM	PM ₁₀	PM _{2.5} *	SO ₂	NO _x	VOC	CO	Single HAP	Total HAPs
HWF Storage	0	0	0	0	0	8.9	0	8.9	8.9
Unit 2R++	0	0	0	0	0	< 21.3	0	23.1	23.1
Unit 2S++	0	0	0	0	0	< 21.3	0	23.1	23.1
Unit 24	0	0	0	0	0	2.2	0	2.2	2.2
Lab Pack	0.6	0.6	0.6	0	0	2.5	0	2.5	2.5
Degassing**	0	0	0	0	0	17.0	0	0.3	0.3
SDS Shredder	0	0	0	0	0	0.1***	0	2.6	2.6
SDS Shaker and conveyor**	77.7	77.7	77.7	0	0	0.7***	0	0	0
+SDS-ATDU from NG Combustion	0.1	0.5	0.5	0.04	6.8		5.7	0.1	0.1
VRU**	0	0	0	0	0	< 23.4	8.6	904.3	904.3
Flare FL1 (from VRU)**	0	0	0	8.1	5.2		28.5	12.6 HCl	13.4
Distillation	0	0	0	0	0	0.06***	0	2.3	2.3
Tank 52-55	0	0	0	0	0	0.5	0	0	0.5
Tank 57-67	0	0	0	0	0	1.9	0	1.9	1.9
Pot Still	0	0	0	0	0	4.2	0	0.5	0.5
Thin Film Evap	0.02	0.1	0.1	0.01	1.1	0.1	0.9	0.02	0.02
Heater	0.02	0.1	0.1	0.01	1.1	0.1	0.9	0.02	0.02
Fugitive	1.9	0.4	0.4	0	0	0	0	0	0
2015 Modification									
SDS Shredder II	0	0	0	0	0	< 95.6	0	0	7.1
SDS ATDU II	0.3	1.0	1.0	0.1	13.7		11.5	0.2	0.3
SDS VRU II	0	0	0	0	0		17.6	1808.6 Hexane	1808.6
Flare FL1 (from VRU II)	0	0	0	16.2	10.5		57.0	13.1 HCl	14.0
SHS	82.8	82.8	82.8	0	0		0	0	0
Tanks 81-87	0	0	0	0	0		0	1.3	1.3
F-01 and F-02	0	0	0	0	0		0	0.1	0.1
Cooling Tower	0.7	0	0	0	0		0	0	0
Emergency Generator	0.2	0.1	0.1	0.9	5.4	0.2	1.2	negl.	negl.
Subtotal for 2015 Modification	83.9	84.1	83.9	17.2	29.6	< 100	87.4	1808.9	1831.4
Total PTE of Entire Source	164.3	163.5	163.3	25.3	43.8	< 199.9	132.0	2713.3 Hexane	2817.1
PSD Major Source Thresholds	250	250	250	250	NA	NA	250	--	25
Emission Offset Major Source Thresholds	NA	NA	NA	NA	100	100	NA	NA	NA
*PM _{2.5} listed is direct PM _{2.5} . **Existing units previously limited under the limit for the SDS; calculations were corrected and/or emissions are now included. ***This unit is limited by 326 IAC 2-3 (Emission Offset). +Calculations are only for natural gas combustion only. Calculations for the natural gas heater were corrected. ++HWF Ship has been separated into Receiving (Unit 2R) and Shipping (Unit 2S)									

- (a) This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant, excluding GHGs, are less than the PSD major source thresholds.
- (b) Emission Offset status:
This modification to an existing minor Emission Offset stationary source is not major because the emissions increase of VOC and NO_x are less than the Emission Offset major source thresholds. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable for the 2015 modification, the Permittee shall comply with the following:

- (1) VOC emissions after control from all the emission units associated with the SDS II shall be less than 95.6 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, along with emissions from the pot still and emergency generator, will limit the potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-3 (Emission Offset) not applicable for this 2015 modification.

Note: After this modification, the PTE of VOC for the entire source will be greater than 100 tons per year. Therefore, the source is considered a Major Source under 326 IAC 2-3 Emission Offset.

- (c) PSD status:
This modification to an existing minor PSD stationary source is not major because the emissions increase of PM, PM₁₀, PM_{2.5}, CO are less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

- (1) PM emissions after control from the SHS shall not exceed 18.9 pounds per hour.
- (2) PM₁₀ emissions after control from the SHS shall not exceed 18.9 pounds per hour.
- (3) PM_{2.5} emissions after control from the SHS shall not exceed 18.9 pounds per hour.
- (4) CO emissions (after control) from the SDS VRU II shall not exceed 7.4 pounds per hour of SDS vapor product processed.

Compliance with these limits, combined with the potential to emit CO, PM, PM₁₀, and PM_{2.5} from other emission units at the source, shall limit the CO, PM, PM₁₀, and PM_{2.5} emissions from the entire source to less than 250 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

- (a) The requirements of the New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, which is incorporated by reference as 326 IAC 12, are not included in the permit, because the ATDU II burners are not steam generating units.

- (b) The requirements of the New Source Performance Standard for Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60.110b, Subpart Kb), which is incorporated by reference as 326 IAC 12, are not included in this permit for Tanks 81 through 87, F-01 and F-02. Tanks 81 through 84 and F-02 each have capacity less than 75 cubic meters (19812.9 gallons). Tanks 85-87 and F-01 have capacity greater than 75 cubic meters (19812.9 gallons); however they store material with an actual vapor pressure less than 15.0 kPa.
- (c) The requirements of the New Source Performance Standard for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes (40 CFR 60, Subpart III) which is incorporated by reference as 326 IAC 12, are not included in the permit because the source does not include an air oxidation reactor.
- (d) The requirements of the New Source Performance Standard for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40 CFR 60, Subpart NNN), which is incorporated by reference as 326 IAC 12, are not included for SDS II because the SDS II does not include a Distillation unit as defined by 40 CFR 60.661. The Solids Distillation System Units are not "distillation units" as this term is defined under New Source Performance Standards. Distillation unit and distillation process are defined under Subpart NNN as:
 - o Distillation unit means a device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, steam jet, etc.), plus any associated recovery system.
 - o Distillation operation means an operation separating one or more feed stream(s) into two or more exit stream(s), each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor-phase as they approach equilibrium within the distillation unit.

The Solids Distillation System (SDS) does not involve separation between the liquid and vapor-phase within the unit. In the SDS unit, organic material and water are separated from solid material by vaporization of such materials to separate them from solids. The vaporized material is then condensed into liquid form.

The applicability of this rule has been re-evaluated for some of the existing units, even though there are no physical changes to these units. The existing Distillation Unit is subject to the requirements of the New Source Performance Standard for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40 CFR 60, Subpart NNN), which is incorporated by reference as 326 IAC 12, because it does produce chemicals listed in 40 CFR 60.667 and was constructed after December 30, 1983. Note: For clarity, these are not pure chemicals but instead mixtures that vary in composition depending upon the composition of feed stocks. This is a Title I change.

The Distillation Unit is subject to the following requirements of 40 CFR 60, Subpart NNN:

- (1) 40 CFR 60.660
- (2) 40 CFR 60.661
- (3) 40 CFR 60.662(a)
- (4) 40 CFR 60.663(f)
- (5) 40 CFR 60.664
- (6) 40 CFR 60.665
- (7) 40 CFR 60.667
- (8) 40 CFR 60.668

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart NNN.

- (e) The requirements of the New Source Performance Standard for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (40 CFR 60, Subpart VV), which is incorporated by reference as 326 IAC 12, are not included in the permit for the SDS II since its operations do not involve chemical synthesis, as that term is commonly defined (there is no corresponding definition within the rule), as its operations involve physical separation of materials to remove undesirable materials (solids, water), but do not involve reactions that create chemical compounds from other chemical compounds. Also, it does not produce any of the chemicals listed in §60.489 in pure form or even in a predictable concentration. Its liquid product has a mixed chemical composition that varies widely over time depending upon the characteristics of waste material being handled.
- (f) The requirements of the New Source Performance Standard for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (40 CFR 60, Subpart RRR), which is incorporated by reference as 326 IAC 12, are not included in the permit because this source does not have a reactor process, as defined in 40 CFR 60.701 and does not manufacture any of the materials listed in 40 CFR 60.707.
- (g) The requirements of New Source Performance Standard (NSPS) for Commercial and Industrial Solid Waste Incinerations Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced on or After June 1, 2001, 40 CFR 60, Subpart CCCC (60.2000 through 60.2265), which is incorporated by reference as 326 IAC 12, are not included in this permit because the source does not have a Commercial and industrial solid waste incineration (CISWI) unit as defined in defined in 40 CFR 60.2265.

Under 40 CFR 60.2265, the definition of solid waste includes discarded material, including contained gaseous material, resulting from industrial, commercial, mining, agricultural operations, and from community activities. The source processes solid, liquid, and gaseous wastes in order to reuse/recycle materials as usable products, using air pollution control equipment to collect/destroy any uncollected particulate and VOC emissions from the processes. The flares used as this source will not combust "contained gaseous materials" as defined by 40 CFR 60.2265, because the VOC combusted is not in a container that is also combusted. The flares at this source, which are considered air pollution control equipment, are each not considered a commercial and industrial solid waste incineration (CISWI) unit as defined by 40 CFR 60.2265, since a commercial and industrial solid waste incineration (CISWI) unit does not include air pollution control equipment.

- (h) The requirements of the New Source Performance Standards for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004 or for Which Modification or Reconstruction is commenced on or After June 16, 2006, 40 CFR 60, Subpart EEEE (60.2280 through 60, 2891), which is incorporated by reference as 326 IAC 12, are not included in this permit, since the processes at this source will not burn solid waste as defined in 40 CFR 60.2977.

Under 40 CFR 60.2977, the definition of solid waste includes discarded material, including contained gaseous material, resulting from industrial, commercial, mining, agricultural operations, and from community activities. The source processes solid, liquid, and gaseous wastes in order to reuse/recycle materials as usable products, using air pollution control equipment to collect/destroy any uncollected particulate and VOC emissions from the processes. The flares used as this source will not combust "contained gaseous materials" as defined by 40 CFR 60.2265, because the organic gases combusted are not in a container that is also combusted. The flares at this source, which are considered air pollution control equipment, are each not considered a commercial and industrial solid waste incineration (CISWI) unit as defined by 40 CFR 60.2977, because the VOC combusted is not in a container that is also combusted. The flares at this source, which are considered air pollution control equipment, are each not considered another solid waste incineration (OSWI) unit as defined in 40 CFR 60.2977, since another solid waste incineration (OSWI) unit does not include air pollution control equipment.

- (i) The diesel-fired emergency generator (896 HP) is subject to New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII, which is incorporated by reference as 326 IAC 12, because it commenced construction after July 11, 2005 and was manufactured after April 1, 2006.

The diesel-fired emergency generator is subject to the following requirements of 40 CFR Part 60, Subpart IIII:

- (1) 40 CFR 60.4200(a)(2)
- (2) 40 CFR 60.4205(b)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207(b)
- (5) 40 CFR 60.4209(a)
- (6) 40 CFR 60.4211(a), (c) & (f)
- (7) 40 CFR 60.4214(b)
- (8) 40 CFR 60.4218
- (9) 40 CFR 60.4219
- (10) Table 8

- (j) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

NESHAP:

- (a) This source is subject to the requirements of National Emission Standard for Hazardous Air Pollutants (NESHAP) for Equipment Leaks (Fugitive Emission Sources), 40 CFR 61, Subpart V (incorporated by reference as 326 IAC 14-8), because it contains valves, pumps, and sampling connections which operate in volatile hazardous air pollutant service. This is a Title I change.

The source is subject to the following requirements of 40 CFR 61, Subpart V:

- (1) 40 CFR 61.240
- (2) 40 CFR 61.241
- (3) 40 CFR 61.242-1
- (4) 40 CFR 61.242-2
- (5) 40 CFR 61.242-7
- (6) 40 CFR 61.242-8
- (7) 40 CFR 61.242-10
- (8) 40 CFR 61.242-11
- (9) 40 CFR 61.245
- (10) 40 CFR 61.246
- (11) 40 CFR 61.247

The provisions of 40 CFR 61 Subpart A – General Provisions, which are incorporated as 326 IAC 14-1, apply to source except when otherwise specified in 40 CFR 61 Subpart V.

- (b) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks from Fugitive Emission Sources of Benzene, 40 CFR Part 61, Subpart J (incorporated by reference as 326 IAC 14-7), are not included in this permit for this modification. The new units as part of SDS II do not have any components that will be in benzene service, as defined in 40 CFR 61.111.
- (c) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Emissions from Benzene Storage Vessels 40 CFR Part 61, Subpart Y are not included in the permit for this modification. The new storage tanks (Tanks 81 through 87, F-01 and F-02) will not store benzene.

- (d) The requirements of National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations 40 CFR 61, Subpart FF are included in the permit for SDS II.

Currently as planned, SDS II will not accept any of the material listed in this rule. However, to provide flexibility in the future, the source has requested that the requirements to be included in the permit.

The SDS II is subject to the following requirements of 40 CFR 61, Subpart FF:

- (1) 40 CFR 61.340;
- (2) 40 CFR 61.341;
- (3) 40 CFR 61.342;
- (4) 40 CFR 61.343;
- (5) 40 CFR 61.345;
- (6) 40 CFR 61.346;
- (7) 40 CFR 61.349;
- (8) 40 CFR 61.350;
- (9) 40 CFR 61.351;
- (10) 40 CFR 61.354(a), (d), (e) and (f);
- (11) 40 CFR 61.355;
- (12) 40 CFR 61.356; and
- (13) 40 CFR 61.357.

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63 Subpart FF.

- (e) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) - From the Synthetic Organic Chemical Manufacturing Industry, 40 CFR Part 63, Subpart F and Subpart G, (incorporated by reference as 326 IAC 20-11) are not included in this permit. The source does not manufacture as a primary product one or more of the chemicals listed under 40 CFR 63.100(b)(1)(i).
- (f) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) - Off-Site Waste and Recovery Operations 40 CFR 63, Subpart DD (incorporated by reference as 326 IAC 20-23) are not included for the SDS II, because this operation is not considered a one of the waste management operations or recovery operations listed under 40 CFR 63.680(a)(2).

The source stated that the only units that are subject to 40 CFR 63, Subpart DD are the Hazardous waste material (HWM) tank storage, identified as Unit 1 and Hazardous waste fuel receiving/shipping, Unit 2R and Unit 2S. See Change 5 in the 'Other Changes' section of this TSD.

- (g) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hazardous waste combustors 40 CFR Part 63, Subpart EEE, (incorporated by reference as 326 IAC 20-28) are not included in the permit since the Permittee does not contain any of the following operations: hazardous waste combustors: hazardous waste incinerators, hazardous waste cement kilns, hazardous waste lightweight aggregate kilns, hazardous waste solid fuel boilers, hazardous waste liquid fuel boilers, and hazardous waste hydrochloric acid production furnaces, as defined in 40 CFR 63.1200. The source processes solid, liquid, and gaseous wastes in order to reuse/recycle materials as usable products, using air pollution control equipment to collect/destroy any uncollected particulate and VOC emissions from the processes.
- (h) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63, Subpart EEEE (incorporated by reference as 326 IAC 20-83) are not included in the permit for SDS II, because the SDS II is not considered an organic liquid distribution operation (OLD) at a major source of HAP emissions.

The applicability of this rule has been re-evaluated for some of the existing units, even though there are no physical changes to these units. Existing tanks 57 through 67 and Unit 2R and Unit 2S are subject to this rule because they are considered organic liquid distribution operation (OLD). This is a Title I change.

Tanks 57 through 67 and Unit 2R and Unit 2S are subject to the following requirements of 40 CFR 63, Subpart EEEE:

- (1) 40 CFR 63.2330
- (2) 40 CFR 63.2334(a)
- (3) 40 CFR 63.2338
- (4) 40 CFR 63.2342(a) & (d)
- (5) 40 CFR 63.2343(b)
- (6) 40 CFR 63.2346(a),(b),(c),(d)&(i)
- (7) 40 CFR 63.2350
- (8) 40 CFR 63.2354
- (9) 40 CFR 63.2358
- (10) 40 CFR 63.2362
- (11) 40 CFR 63.2366
- (12) 40 CFR 63.2370
- (13) 40 CFR 63.2374
- (14) 40 CFR 63.2378
- (15) 40 CFR 63.2382
- (16) 40 CFR 63.2386
- (17) 40 CFR 63.2390
- (18) 40 CFR 63.2394
- (19) 40 CFR 63.2396
- (20) 40 CFR 63.2398
- (21) 40 CFR 63.2402
- (22) 40 CFR 63.2406
- (23) Table 1
- (24) Table 2
- (25) Table 4
- (26) Table 5
- (27) Table 6
- (28) Table 7
- (29) Table 8
- (30) Table 10
- (31) Table 11
- (32) Table 12

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63 Subpart EEEE.

- (i) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing 40 CFR 63, Subpart FFFF (incorporated by reference as 326 IAC 20-84) are not included for the SDS II, because it does not meet the definition of a miscellaneous organic chemical manufacturing process, as defined in 40 CFR 63.2550.

The applicability of this rule has been re-evaluated for some of the existing units, even though there are no physical changes to these units. The existing Pot Still, Thin Film Evaporator and Distillation Unit are considered miscellaneous organic chemical manufacturing processes, as defined in 40 CFR 63.2550, and therefore are subject to this rule. This is a Title I change.

The existing Pot Still, Thin Film Evaporator and Distillation Unit are subject to the following parts of 40 CFR 63, Subpart FFFF:

- (1) 40 CFR 63.2430
- (2) 40 CFR 63.2435(a),(b),(d) and (e)
- (3) 40 CFR 63.2440
- (4) 40 CFR 63.2445(a)(2),(c),(d) and (f)
- (5) 40 CFR 63.2450(a),(b),(c),(e),(g),(h),(l),(m) and (p)
- (6) 40 CFR 63.2455(a) and (b)
- (7) 40 CFR 63.2465
- (8) 40 CFR 63.2470
- (9) 40 CFR 63.2475
- (10) 40 CFR 63.2480(a) and (b)
- (11) 40 CFR 63.2505
- (12) 40 CFR 63.2515
- (13) 40 CFR 63.2520
- (14) 40 CFR 63.2525(a)-(f)
- (15) 40 CFR 63.2540
- (16) 40 CFR 63.2545
- (17) 40 CFR 63.2550
- (18) Table 1
- (19) Table 3
- (20) Table 4
- (21) Table 5
- (22) Table 6
- (23) Table 8
- (24) Table 9
- (25) Table 11
- (26) Table 12

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63 Subpart FFFF.

- (j) The diesel-fired emergency generator (896 HP) is subject to the requirements of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (326 IAC 20-82), because it is considered a new (construction commenced on or after December 19, 2002) stationary reciprocating internal combustion engine (RICE) at a major source of hazardous air pollutants (HAP).

The diesel-fired emergency generator is subject the following applicable portions of 40 CFR 63, Subpart ZZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(b)(1)(i)
- (4) 40 CFR 63.6605(b)
- (5) 40 CFR 63.6640(f)
- (6) 40 CFR 63.6645(f)
- (7) 40 CFR 63.6665
- (8) 40 CFR 63.6670
- (9) 40 CFR 63.6675

Pursuant to 40 CFR 63.6665, the diesel-fired emergency generator does not have to meet the requirements of 40 CRF 63, Subpart A (General Provisions), since it is considered a new stationary RICE located at a major source of HAP emissions.

- (k) The Anaerobic Thermal Desorption Unit, ATDU II, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and

Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD (incorporated by reference as 326 IAC 20-95) because it is a process heater as defined in 40 CFR 63.7575. It transfers heat indirectly to the shredded material charged to the ATDU. As defined by 40 CFR 63.7575, process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3 of this chapter, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves. Waste heat process heaters are excluded from this definition.

The ATDU II is subject to the following requirements of 40 CFR 63, Subpart DDDDD:

- (1) 40 CFR 63.7485
- (2) 40 CFR 63.7490(a)(2) & (b)
- (3) 40 CFR 63.7495(a)
- (4) 40 CFR 63.7499(l)
- (5) 40 CFR 63.7500
- (6) 40 CFR 63.7505(a)
- (7) 40 CFR 63.7510(g)
- (8) 40 CFR 63.7515(d)
- (9) 40 CFR 63.7530(d), (e) and (f)
- (10) 40 CFR 63.7540(a)
- (11) 40 CFR 63.7545(a),(c) and (e)
- (12) 40 CFR 63.7550
- (13) 40 CFR 63.7555(a)
- (14) 40 CFR 63.7560
- (15) 40 CFR 63.7565
- (16) 40 CFR 63.7570
- (17) 40 CFR 63.7575
- (18) Table 3

The ATDU is also subject to 40 CFR 63, Subpart DDDDD. This is a new requirement for an existing unit. This is a Title I change.

The ATDU is subject to the following requirements of 40 CFR 63, Subpart DDDDD:

- (1) 40 CFR 63.7485
- (2) 40 CFR 63.7490(a)(2) & (b)
- (3) 40 CFR 63.7495(b)
- (4) 40 CFR 63.7499(l)
- (5) 40 CFR 63.7500
- (6) 40 CFR 63.7505(a)
- (7) 40 CFR 63.7510(e)
- (8) 40 CFR 63.7515(d)
- (9) 40 CFR 63.7530(d), (e) and (f)
- (10) 40 CFR 63.7540(a)
- (11) 40 CFR 63.7545(a),(b) and (e)
- (12) 40 CFR 63.7550
- (13) 40 CFR 63.7555(a)
- (14) 40 CFR 63.7560
- (15) 40 CFR 63.7565
- (16) 40 CFR 63.7570
- (17) 40 CFR 63.7575
- (18) Table 3

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63 Subpart DDDDD.

- (k) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.
- (l) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
SDS Shredder II	Carbon adsorption	Y	7.1	0.14	100	N	N
Tank 81	Carbon adsorption	Y	0.11	0.002	100	N	N
Tank 82	Carbon adsorption	Y	0.11	0.002	100	N	N
Tank 83	Carbon adsorption	Y	0.11	0.002	100	N	N
Tank 84	Carbon adsorption	Y	0.11	0.002	100	N	N
Tank 85	Carbon adsorption	Y	0.24	0.005	100	N	N
Tank 86	Carbon adsorption	Y	0.23	0.005	100	N	N
Tank 87	Carbon adsorption	Y	0.27	0.005	100	N	N
SHS - PM/ PM10/PM2.5	Baghouse	Y	330.4	6.6	100	Y	N
SDS II VRU II - VOC	Flare	Y	4656.3	93.1	100	Y	N
SDS II VRU II - CO	Flare	Y	4656.3	<100	100	Y	N
SDS II VRU II - Hexane	Flare	N	1808.6	36.2	100	N	N
SDS II Shredder II - VOC	Carbon adsorption	N	7.1	0.1	100	N	N
F-01- VOC	Carbon adsorption	N	0.1	0.0024	100	N	N
F-02- VOC	Carbon adsorption	N	0.02	0.0004	100	N	N
SDS VRU - VOC	Flare	Y	2328.1	46.6	100	Y	N
SDS VRU - CO	Flare	Y	809.2	16.2	100	Y	N
SDS VRU - Hexane	Flare	N	904.3	18.1	25	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the SDS VRU for VOC and CO upon issuance of this modification. A CAM plan will be incorporated into this permitting action.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the SHS for PM/PM10/PM2.5 and the SDS II VRU II for VOC and CO upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-1.1-5 (Nonattainment New Source Review)

Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the VRU II will emit greater than ten (10) tons per year for a single HAP. Therefore, 326 IAC 2-4.1 would apply to the VRU II, however, pursuant to 326 IAC 2-4.1-1(b)(2), because this VRU II is specifically regulated by 40 CFR 61, Subpart V and NESHAP 40 CFR 61, Subpart FF, which is issued pursuant to Section 112(d) of the CAA, the VRU II is exempt from the requirements of 326 2-4.1.

The operation of all other units as part of SDS II will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is located in Lake County, and has a potential to emit VOC greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 8-1-6 (Volatile Organic Compounds - BACT)

Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), Best Available Control Technology (BACT) is required for all facilities constructed after January 1, 1980 that have potential VOC emissions of equal to or greater than twenty-five (25) tons per year and are not regulated by other rules in 326 IAC 8.

The proposed new Solids Distillation System (SDS II) has potential VOC emissions greater than twenty-five (25) tons per year. In addition, the Permittee provided additional information on July 8, 2014, regarding potential emissions from the existing Solids Distillation System (SDS). Based on the information provided, the total combined potential VOC emissions from the Solids Distillation System (SDS), Distillation Unit, Tanks 52-55, and the Pot Still is greater than twenty-five (25) tons per year.

Therefore, the Permittee is required to control VOC emissions from the emission units associated with the SDS and SDS II systems, the Distillation Unit, Tanks 52-55, and the Pot Still pursuant to the provisions of 326 IAC 8-1-6 (BACT).

According to the BACT analysis contained in Appendix B of this TSD, IDEM, OAQ has determined that the following requirements represent BACT for the SDS and SDS II systems, the Distillation Unit, Tanks 52-55, and the Pot Still:

Pursuant to 326 IAC 8-1-6 (BACT) and SSM 089-34432-00345, the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

- (a) The vapor recovery units, SDS VRU and SDS II VRU II, shall be controlled by open flare FL1 with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that SDS VRU and/or SDS II VRU II are in operation, except during maintenance or malfunction of the flare FL1. During maintenance or malfunction of the flare FL1, the SDS VRU shall be controlled by the carbon adsorption system (C18) with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that the SDS VRU is in operation and the SDS II VRU II shall be controlled by the carbon adsorption system (C38) with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that the SDS II VRU II is in operation.
- (b) VOC emissions after control from the SDS VRU shall be less than 23.4 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) VOC emissions after control from all the emission units associated with the SDS II shall be less than 95.6 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) Each of the emission units listed in the table below shall be controlled by the associated carbon adsorption system with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that each of these emission units are in operation.

Emission Unit(s)	Carbon Adsorption System
SDS Shredder	C14
Anaerobic Thermal Desorption System enclosed feed conveyor	C15
Oil-Water Separator	C16
Water Tank	C17
Distillation Unit	C19
Tank 55	C20
Tanks 52 through 54	C21
Pot Still	C33
SDS Shredder II	C37
F-01 and F-02	C39
Tanks 81 through 84	C40
Tank 85	C41
Tank 86	C42
Tank 87	C43

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

At this time, IDEM, OAQ is unable to determine if any of the existing units should have been subject to 326 IAC 8-7. The applicability determination will be made at the next Part 70 Operating Permit Renewal. New units added as part of this modification were evaluated for applicability under 326 IAC 8-1-6.

326 IAC 8-20 (Industrial Wastewater)

This rule applies to any source that generates process wastewater and meets all of the following criteria:

- (1) Is located in Lake County or Porter County.
- (2) Has the combined total potential to emit VOC emissions equal to or greater than one hundred (100) tons per year from all of the following:
 - (A) Industrial wastewater sources (all waste management units).
 - (B) All noncontrol technique guideline (non-CTG) sources.
 - (C) Unregulated emissions from CTG emission units, except emission units regulated under 40 CFR 60, Subpart BBB*; 40 CFR 60, Subpart III*; 40 CFR 60, Subpart NNN*; or 40 CFR 63, Subpart T*.

- (3) Has facility operations specifically listed under any of the following industrial categories:
- (A) Organic chemicals, plastics, and synthetic fibers manufacturing industry under Standard Industrial Classification (SIC) codes 2821, 2823, 2824, 2865, and 2869.
 - (B) Pharmaceutical industry under SIC codes 2833, 2834, and 2836.
 - (C) Pesticide manufacturing industry under SIC code 2879.
 - (D) Hazardous waste treatment, storage, and disposal facilities under SIC codes 4952, 4953, and 4959.

Pursuant to 326 IAC 8-20-1(a), the source is located in Lake County, has the combined total PTE of VOC greater than 100 tons per year of non-control technique guideline (non-CTG) sources, and has operations listed in SIC 4953. However, the source does not have any waste management units, pursuant to the definition in 326 IAC 8-20-2(49)(D) and therefore there are no applicable requirements. As specified under 326 IAC 8-20-2(49)(D), "waste management unit" does not include equipment is used for recovery, since this equipment is part of a process unit and is not a waste management unit.

Tradebe Treatment and Recycling, LLC has provided the following explanation of the wastewater generated at this source:

No water is processed in the ATDU's, the water is a result of the processing of solid material in an ATDU. The water used by the SDS operations is part of the process.

All materials have moisture and when they are heated the moisture is driven out of the material (i.e., steam) and some is entrained with the solvent vapors. The vaporized solvent/steam gases are cooled with contact water in the VRU. When cooled, the moisture and solvent re-condenses into a solvent – water solution. This solution is sent to the Oil Water Separator (OWS) where gravity allows the solvent to separate from the water (2 distinct phases). The solvent solution is sent to a tank where it is accumulated prior to being loaded on vehicles for shipment off site as the SDS Degreaser.

The water is sent to a different tank where it continues to cool and is reused in the cooling process (VRU). Because everything has moisture in it (either the material or the packaging, such as cardboard, wood) from humidity or from precipitation, the SDS process generates 3,000 – 5,000 gallons (depending on what is processed) in a 24 hour period. This excess water is removed from the cooling tank (classified at this time as a waste) and added to the waste sent to the cement kilns.

ATDU II

326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

The ATDU II is an indirect heating unit located in Lake County. Since the limit in 326 IAC 6.8-1 is more stringent than 326 IAC 6-2, the ATDU II is subject to 326 IAC 6.8-1 and not subject to 326 IAC 6-3-2.

326 IAC 6.8 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6.8-1, the particulate matter (PM) from the ATDU II shall not exceed three-hundredth (0.03) grain per dry standard cubic foot (dscf).

In addition, the existing natural gas fired heater associated with the ATDU is being re-evaluated under 326 IAC 6.8-1, because it was overlooked in previous reviews.

Pursuant to 326 IAC 6.8-1, the particulate matter (PM) from the ATDU shall not exceed three-hundredth (0.03) grain per dry standard cubic foot (dscf).

SHS and cooling tower

326 IAC 6.8 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6.8-1, the particulate matter (PM) from the SHS and cooling tower SDS II 13 shall each not exceed three-hundredth (0.03) grain per dry standard cubic foot (dscf).

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The SHS and cooling tower are not subject to the requirements of 326 IAC 6-3-2, because these units are subject to a more stringent particulate matter limitation under 326 IAC 6.8.

Existing Shipping/Receiving Unit 2

326 IAC 8-1-6 (Volatile Organic Compounds)

The applicability of this rule has been reevaluated for some of the existing units, even though there are no physical changes to these units. In order to more clearly describe existing emission units, the existing shipping/receiving unit 2 has been separated into two units. Unit 2R (Receiving) and Unit 2S (Shipping) better reflect these operations. In addition, the emission calculations for Unit 2 (now Unit 2R and 2S) have been corrected to indicate that the maximum throughput of Unit 2R is 17,200 gal/hr and the maximum throughput of Unit 2S is 13,200 gal/hr. As a result of the corrected calculations, the uncontrolled/unlimited potential to emit VOC is greater than 25 tons per year. The source has requested VOC limits on Units 2R and 2S of less than 25 tons per year in order to render the requirements of 326 IAC 8-1-6 not applicable to Unit 2R and Unit 2S.

In order to render 326 IAC 8-1-6 (BACT) not applicable to Unit 2R and Unit 2S, Permittee shall comply with the following:

- (a) The throughput to Unit 2R and Unit 2S shall be less than 41,450,000 gallons of liquid material per twelve (12) consecutive month period, each, with compliance determined at the end of each month.
- (b) Loading loss VOC emissions from Unit 2R and Unit 2S shall each not exceed 1.03 pounds of VOC per 1,000 gallons of liquid material throughput.

Compliance with these limits shall limit the VOC emissions from Unit 2R and Unit 2S to less than 25 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 8-1-6 not applicable to Unit 2R and Unit 2S.

Tanks 81 through 87, F-01 and F-02

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1, stationary vessels located in Lake County, with a capacity less than thirty-nine thousand (39,000) gallons, are subject to the reporting and record keeping provisions of sections 326 IAC 8-9-6(a) and 326 IAC 8-9-6(b) of this rule and are exempt from all other provisions of this rule. Tanks 81 through 87, F-01 and F-02 are applicable to 326 IAC 8-9-6(a) & (b).

The Permittee shall maintain records of the following for the life of each vessel:

- (1) The vessel identification number;
- (2) The vessel dimensions;
- (3) The vessel capacity; and
- (4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4(a) and 4(b), if applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4(b), if applicable, with a certification that the emission control equipment meets the applicable standards.

Emergency Generator

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The diesel-fired emergency generator is not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, it does not meet the definition of an indirect heating unit.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The diesel-fired emergency generator is exempt from the requirements of 326 IAC 6-3, because, it is not considered a "manufacturing processes", and pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, the diesel-fired emergency generator is not subject to the requirements of 326 IAC 7-1.1, since it has unlimited sulfur dioxide (SO₂) emissions less than twenty-five (25) tons per year and ten (10) pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

The diesel-fired emergency generator is is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)

The requirements of 326 IAC 10-3 do not apply to this source since it does not operate any of the categories of facilities regulated by this rule.

326 IAC 10-4 (Nitrogen Oxides Budget Trading Program)

The requirements of 326 IAC 10-4 do not apply to this source since it does not operate electricity generating units or large affected units is defined in 326 IAC 10-4-2(27).

326 IAC 10-5 (Nitrogen Oxide Reduction Program for Internal Combustion Engines (ICE))

The source does not operate any large NO_x SIP call engines. Therefore, 326 IAC 10-5 does not apply.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Determination Requirements

Summary of Testing Requirements					
Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
VRU II	Flare FL1	Within 180 days after issuance of permit 089-34503-00345	VOC	Once every 5 years from last valid compliance demonstration	40 CFR 60.18
VRU II	Flare FL1		CO		
VRU	Flare FL1		VOC		
VRU	Flare FL1		CO		

- These testing conditions are required to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (VOC), and 326 IAC 2-7 (Part 70)).
- No testing will be required for the solids handling system because only approximately 75% overall control efficiency is required to comply with applicable requirements.

Compliance Monitoring Requirements

Control	Parameter	Frequency	Range	Excursions and Exceedances
Flare FL1	Presence of flare pilot flame	Daily	Normal-Abnormal	Response Steps
Baghouse BH34	Water Pressure Drop	Daily	2.0 to 6.0 inches	Response Steps
	Replace broken or failed bags	As needed	NA	NA
All carbon adsorption systems (carbon canisters) associated with SDS and SDS II	VOC detection	Daily	VOC outlet concentration greater than or equal to two percent (2%) of inlet concentration	Response Steps

NA = Not Applicable

These monitoring conditions are necessary because:

- Flare FL1 must operate properly to ensure compliance with 326 IAC 2-3 (Emission Offset), 326 IAC 8-7 (VOC), 40 CFR 64 (CAM), 326 IAC 2-7 (Part 70), and the limits that render 326 IAC 2-2 (PSD) not applicable.
- Baghouse BH3 must operate properly to ensure compliance with 326 IAC 6.8 (Particulate Emission Limitations for Lake County), 326 IAC 2-7 (Part 70), and the limits that render 326 IAC 2-2 (PSD) not applicable.
- All carbon adsorption systems (carbon canisters) associated with SDS and SDS II must operate properly to ensure compliance with 326 IAC 2-3 (Emission Offset), 326 IAC 8-7 (VOC), 40 CFR 64 (CAM), 326 IAC 2-7 (Part 70), and the limits that render 326 IAC 2-3 (Emission Offset) not applicable.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T 089-29424-00345. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Change 1: The new SDS II units have been added to the permit. As a result of this modification, the source is considered a Major Source under 326 IAC 2-3 Emission Offset.

Change 2: The PTE calculations for the existing Vapor Recovery Unit (VRU) were not previously included correctly. Based on the updated PTE calculations, a separate Emission Offset minor limit is needed in order to correctly limit VOC and a PSD minor limit is needed in order to limit source-wide CO emissions to less than 250 tons per year. Also, the requirements of 326 IAC 8-1-6 have been added to the permit for the existing VRU.

Change 3: Existing Condition D.1.5 required testing of Lab Pack Booth 1 by December 6, 2012. This testing has been completed. Therefore, existing Condition D.1.5 can be removed from the permit. This also satisfies the requirement of existing condition D.1.1(a) and therefore this condition can also be removed:

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

.....

Source Status:

Part 70 Operating Permit Program
 Minor Source, under PSD and ~~Emission Offset Rules~~
Major Source, under Emission Offset Rules
 Major Source, Section 112 of the Clean Air Act

.....

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

.....

- (m) **One (1) Solids Distillation System, identified as SDS II, approved in 2015 for construction, with a maximum throughput rate of 5.0 tons of waste per hour, consisting of:**
- (1) **One (1) SDS Shredder and feed conveyor, identified as SDS Shredder II, with a processing capacity of 5.0 tons per hour, vented to a carbon adsorption system for VOC control (C37), exhausting to stack SDS II 01.**
 - (2) **One (1) Anaerobic Thermal Desorption Unit, identified as ATDU II, with a maximum capacity of 32 MMBtu/hr, using natural gas, no control, exhausting to stack SDS II 02.**

Under 40 CFR 63, Subpart DDDDD, the ATDU II is considered an affected facility.
 - (3) **One (1) Vapor Recovery Unit, identified as VRU II, using a John Zink open flare (FL1) for control of non-condensable gases and a carbon adsorption system for backup VOC control (C38), exhausting to stack SDS 07.**
 - (4) **One (1) solids handling system, identified as SHS, vented to a baghouse for particulate control (BH3), with VOC/HAP emissions, exhausting to stack SDS II 04.**
 - (5) **One (1) Oil-Water Separator, identified as F-01, with a maximum of 22,000 gal, and one interceptor tank identified as F-02 with a maximum of 3,700 gal, associated with the VRU II, venting to a carbon adsorption system for VOC control (C39), exhausting to stack SDS II 03.**
 - (6) **Four (4) tanks, identified as Tank 81 through 84, each with a maximum of 12,000 gal, used to store liquid products venting to a common carbon adsorption system for VOC control (C40), exhausting to stack SDS II 08.**
 - (7) **One (1) tank, identified as Tank 85 used to store process water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C41), exhausting to stack SDS II 07.**
 - (8) **One (1) tank, identified as Tank 86 used to store process water/light sludge water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C42), exhausting to stack SDS II 06.**
 - (9) **One (1) tank, identified as Tank 87 used to store oil/solvent, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C43), exhausting to stack SDS II 06.**
 - (10) **One (1) insignificant cooling tower, identified as SDS II 13.**

Under 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

.....

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

.....

(m) One (1) Solids Distillation System, identified as SDS II, approved in 2015 for construction, with a maximum throughput rate of 5.0 tons of waste per hour, consisting of:

- (1) One (1) SDS Shredder and feed conveyor, identified as SDS Shredder II, with a processing capacity of 5.0 tons per hour, vented to a carbon adsorption system for VOC control (C37), exhausting to stack SDS II 01.**
- (2) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU II, with a maximum capacity of 32 MMBtu/hr, using natural gas, no control, exhausting to stack SDS II 02.**

Under 40 CFR 63, Subpart DDDDD, the ATDU II is considered an affected facility.

- (3) One (1) Vapor Recovery Unit, identified as VRU II, using a John Zink open flare (FL1) for control of non-condensable gases and a carbon adsorption system for backup VOC control (C38), exhausting to stack SDS 07.**
- (4) One (1) solids handling system, identified as SHS, vented to a baghouse for particulate control (BH3), with VOC/HAP emissions, exhausting to stack SDS II 04.**
- (5) One (1) Oil-Water Separator, identified as F-01, with a maximum of 22,000 gal, and one interceptor tank identified as F-02 with a maximum of 3,700 gal, associated with the VRU II, venting to a carbon adsorption system for VOC control (C39), exhausting to stack SDS II 03.**
- (6) Four (4) tanks, identified as Tank 81 through 84, each with a maximum of 12,000 gal, used to store liquid products venting to a common carbon adsorption system for VOC control (C40), exhausting to stack SDS II 08.**
- (7) One (1) tank, identified as Tank 85 used to store process water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C41), exhausting to stack SDS II 07.**
- (8) One (1) tank, identified as Tank 86 used to store process water/light sludge water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C42), exhausting to stack SDS II 06.**
- (9) One (1) tank, identified as Tank 87 used to store oil/solvent, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C43), exhausting to stack SDS II 06.**
- (10) One (1) insignificant cooling tower, identified as SDS II 13.**

Under 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Emission Offset Minor Limit [326 IAC 2-3][326 IAC 8-1-6]

~~(a) The IDEM, OAQ has information that indicates that several facilities described in this section may be subject to the requirements of 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7. Specifically, IDEM, OAQ questions the efficiency of the capture system associated with the carbon controls on Lab Pack Booth 1. Also, IDEM, OAQ has been unable to validate the source's calculations for stack emissions from these facilities. Therefore, the Permit Shield provided in Section B of this permit does not apply to Lab Pack Booth 1 with regards to 326 IAC 2-3, 326 IAC 8-1-6 and 326 IAC 8-7. Once this matter is resolved, the OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to address the aforementioned rules, and a schedule for achieving compliance with any requirements.~~

(ba) Pursuant to MSM 089-15970-00345, issued December 2, 2003, and MPM 089-18513-00345, issued February 4, 2004, and as revised by this Part 70 permit, the VOC emissions from the SDS shredder, Solids Distillation System and Distillation Unit shall not exceed the emission limits listed in the table below:

Unit ID	Stack(s) ID	VOC Emission Limit (lb/hr)
SDS Shredder	SDS 01(a) and (b).	0.028, total
Solids Distillation System*	SDS 02, SDS 03, SDS 04, SDS 07, SDS 08, and SDS 09	0.169, total
Distillation Unit	SDS 05	0.014

* Not including the SDS Shredder

(b) In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable for the 2003 modification, the Permittee shall comply with the following:

VOC emissions after control from the SDS VRU shall be less than 23.4 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits is equivalent to less than or equal to VOC emissions of 0.92 tons per year. Combined with the VOC emissions from product tanks 02 through 04, condensed liquid tank 01 and the insignificant combustion units, the VOC emissions from the modification permitted via MSM 089-15970-00345, issued December 2, 2003, are equal shall limit VOC emissions to less than 25 tons per year twelve (12) consecutive month period from the emission units added in as part of MSM 089-15970-00345, issued December 2, 2003. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable to these units from the 2003 modification.

(c) In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable for the 2015 modification, the Permittee shall comply with the following:

VOC emissions after control from all the emission units associated with the SDS II shall be less than 95.6 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, along with emissions from the pot still and emergency generator, shall limit the potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-3 (Emission Offset) not applicable for this 2015 modification.

D.1.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

- (a) PM emissions after control from the SHS shall not exceed 18.9 pounds per hour.
- (b) PM₁₀ emissions after control from the SHS shall not exceed 18.9 pounds per hour.
- (c) PM_{2.5} emissions after control from the SHS shall not exceed 18.9 pounds per hour.
- (d) CO emissions (after control) from the SDS VRU shall not exceed 7.4 pounds per hour of SDS vapor product processed.
- (e) CO emissions (after control) from the SDS VRU II shall not exceed 7.4 pounds per hour of SDS II vapor product processed.

Compliance with these limits, combined with the potential to emit CO, PM, PM₁₀, and PM_{2.5} from other emission units at the source, shall limit the CO, PM, PM₁₀, and PM_{2.5} emissions from the entire source to less than 250 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.3 Best Available Control Technology (BACT) - VOC [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT) and SSM 089-34432-00345, the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

- (a) The vapor recovery units, SDS VRU and SDS II VRU II, shall be controlled by open flare FL1 with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that SDS VRU and/or SDS II VRU II are in operation, except during maintenance or malfunction of the flare FL1. During maintenance or malfunction of the flare FL1, the SDS VRU shall be controlled by the carbon adsorption system (C18) with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that the SDS VRU is in operation and the SDS II VRU II shall be controlled by the carbon adsorption system (C38) with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that the SDS II VRU II is in operation.
- (b) VOC emissions after control from the SDS VRU shall be less than 23.4 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) VOC emissions after control from all the emission units associated with the SDS II shall be less than 95.6 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) Each of the emission units listed in the table below shall be controlled by the associated carbon adsorption system with an overall VOC control efficiency (including the capture efficiency and destruction efficiency) of equal to or greater than 98%, at all times that each of these emission units are in operation.

Emission Unit(s)	Carbon Adsorption System
SDS Shredder	C14
Anaerobic Thermal Desorption System enclosed feed conveyor	C15
Oil-Water Separator	C16
Water Tank	C17
Distillation Unit	C19

Emission Unit(s)	Carbon Adsorption System
Tank 55	C20
Tanks 52 through 54	C21
Pot Still	C33
SDS Shredder II	C37
F-01 and F-02	C39
Tanks 81 through 84	C40
Tank 85	C41
Tank 86	C42
Tank 87	C43

D.1.25 Particulate Emission Limitations for Lake County [326 IAC 6.8-1]

Pursuant to 326 IAC 6.8-1-2, particulate matter from the shaker and conveyor system section of the Solids Distillation System (exhausting to stacks SDS 04 and SDS 09), **solids handling system (SHS), the natural gas fired heater associated with the ATDU, the natural gas fired heater associated with ATDU II and cooling tower SDS II 13**, shall each not exceed 0.03 grain per dry standard cubic foot.

D.1.36 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the following applies to HWF mix blend and storage tanks 1R, 4, 18, 19, 20, 21, 22, and 23, HWF blending and storage tanks 6 and 7, tank 24HP, tank 25HD, HWF receiving and storage tank 29, RCRA hazardous waste tanks 52, 53, 54 and 68, condensed liquid tank 55, and product tanks 57 through 67, **Tanks 81 through 87, F-01 and F-02**

.....

D.1.47 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.58 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~In order to determine the applicability of 326 IAC 8-1-6 and 326 IAC 8-7, the Permittee shall perform VOC testing on Lab Pack Booth 1 on or before December 6, 2012, utilizing methods approved by the Commissioner. Testing shall be performed to determine VOC capture and destruction efficiency and shall be conducted in accordance with Section C - Performance Testing.~~

In order to demonstrate compliance with Conditions D.1.1(b), D.1.1(c), and D.1.3(a), the Permittee shall perform testing of flare FL1 controlling the SDS VRU and SDS II VRU II pursuant to the requirements of 40 CFR 60.18, utilizing methods as approved by the Commissioner, not later than one hundred and eighty (180) days after initial issuance of this permit, 089-34503-00345. Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this section.

D.1.9 VOC Emissions

Compliance with the VOC limit contained in Condition D.1.1(c) shall be determined using the following equations:

$$V_{TOT} = \sum_{m=1}^{12} [V_S + V_{SHS} + V_{VRUII} + V_{T81-84} + V_{T85} + V_{T86} + V_{T87} + V_{F-01} + V_{F-02}]$$

$$V_S = \left(W * EF_S * \left(\frac{100\% - CE_S}{100\%} \right) \right)$$

$$V_{SHS} = (W * EF_{SHS})$$

$$V_{VRUII} = \left(W * EF_{VRUII} * \left(\frac{100\% - CE_{F-CC}}{100\%} \right) + V_F \right)$$

$$V_{T81-84} = \left(U_{T81-84} * \left(\frac{100\% - CE_{T81-84}}{100\%} \right) \right)$$

$$V_{T85} = \left(U_{T85} * \left(\frac{100\% - CE_{T85}}{100\%} \right) \right)$$

$$V_{T86} = \left(U_{T86} * \left(\frac{100\% - CE_{T86}}{100\%} \right) \right)$$

$$V_{T87} = \left(U_{T87} * \left(\frac{100\% - CE_{T87}}{100\%} \right) \right)$$

$$V_{F-01} = \left(U_{F-01} * \left(\frac{100\% - CE_{F-01}}{100\%} \right) \right)$$

$$V_{F-02} = \left(U_{F-02} * \left(\frac{100\% - CE_{F-02}}{100\%} \right) \right)$$

Where: V

V_{TOT}	= Total emissions of VOC emissions after control from the SDS II (tons/year);
m	= Each calendar month during the compliance period;
V_S	= Total VOC emissions (after control) from the SDS II shredder per month (tons);
V_{SHS}	= Total VOC emissions (after control) from the SDS II solids handling system per month (tons);
V_{VRUII}	= Total VOC emissions (after control) from the SDS II VRU II per month (tons);
V_F	= Total VOC emissions created by flare FL1 per month (tons);
V_{T81-84}	= Total VOC emissions (after control) from the Tanks 81 through 84 per month (tons);
V_{T85}	= Total VOC emissions (after control) from the Tank 85 per month (tons);
V_{T86}	= Total VOC emissions (after control) from the Tank 86 per month (tons);

V_{T87}	= Total VOC emissions (after control) from the Tank 87 per month (tons);
V_{F-01}	= Total VOC emissions (after control) from the F-01 per month (tons);
V_{F-02}	= Total VOC emissions (after control) from the F-02 per month (tons);
W	= Total weight of input material fed to shredder per month (tons);
EF_S	= VOC uncontrolled emission factor for the SDS II shredder (lb/ton);
EF_{SHS}	= VOC uncontrolled emission factor for the SDS II solids handling system (lb/ton);
$EF_{VRU II}$	= VOC uncontrolled emission factor for the SDS II VRU II (lb/ton);
U_{T81-84}	= VOC uncontrolled emissions for Tanks 81 through 84 (ton/yr);
W_{T85}	= VOC uncontrolled emissions for Tank 85 (ton/yr);
U_{T86}	= VOC uncontrolled emissions for Tank 86 (ton/yr);
U_{T87}	= VOC uncontrolled emissions for Tank 87 (ton/yr);
U_{F-01}	= VOC uncontrolled emissions for F-01 (ton/yr);
U_{F-02}	= VOC uncontrolled emissions for F-02 (ton/yr);
CE_S	= VOC control efficiency of the shredder carbon adsorption system (%);
CE_{F-CC}	= VOC control efficiency of the flare FL1 or carbon adsorption system (%);
CE_{T81-84}	= VOC control efficiency of the Tanks 81 through 84 carbon adsorption system (%);
CE_{T85}	= VOC control efficiency of the Tank 85 carbon adsorption system (%);
CE_{T86}	= VOC control efficiency of the Tank 86 carbon adsorption system (%);
CE_{T87}	= VOC control efficiency of the Tank 87 carbon adsorption system (%);
CE_{F-01}	= VOC control efficiency of the F-01 carbon adsorption system (%);
CE_{F-02}	= VOC control efficiency of the F-02 carbon adsorption system (%);

Each of the VOC control efficiency values shall equal 98%.

D.1.10 VOC Emissions

Compliance with the VOC limit contained in Condition D.1.1(c) and D.1.3(b) shall be determined as follows:

$$V_{TOT} = \sum_{m=1}^{12} \left[W * EF_{VRU} * \left(\frac{100\% - CE_{F-CC}}{100\%} \right) + V_F \right]$$

Where: V

TOT	= Total emissions of VOC emissions after control from the SDS VRU (tons/year);
m	= Each calendar month during the compliance period;
W	= Total weight of input material fed to SDS shredder per month (tons);
EF_{VRU}	= VOC uncontrolled emission factor for the SDS VRU (lb/ton);
CE_{F-CC}	= VOC control efficiency of the flare FL1 or carbon adsorption system (%); (this value shall equal 98%).
V_F	= Total VOC emissions created by flare FL1 per month (tons);

D.1.611 Emissions Controls [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) In order to ensure compliance with Condition D.1.25:

- (1) The baghouse shall be in operation and control particulate emissions at all times that the shaker and conveyor system section of the Anaerobic Thermal Desorption System is in operation.
- (2) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable

compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) In order to ensure compliance with Conditions D.1.2(a), D.1.2(b), and D.1.2(c):
- (1) Baghouse BH3 shall be in operation and control particulate emissions at all times that the solids handling system, SHS is in operation.
 - (2) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (c) In order to ensure compliance with Condition D.1.1(b), D.1.1(c), D.1.3(a), D.1.3(b), D.1.3(c), D.1.9, and D.1.10:
- (1) The flare FL1 shall be in operation and control VOC emissions at all times that the VRU and/or VRU II is in operation, except during maintenance or malfunction of the flare FL1. During maintenance or malfunction of the flare FL1, the carbon adsorption system (C18) shall be in operation and control VOC emissions at all times that the VRU is in operation and the carbon adsorption system (C38) shall be in operation and control VOC emissions at all times that the VRU II is in operation. For the purpose of this section, "operation of the flare" shall mean the presence of a pilot flame or equivalent. The flare shall be operated per manufacturer's specifications.
 - (2) The Permittee shall comply with the requirements of 40 CFR 60.18(b) (included as Attachment G) for the flare associated with the Vapor Recovery Unit (VRU).
- (d) In order to ensure compliance with Conditions D.1.1(c), D.1.3(c), D.1.3(d) and D.1.9, each of the carbon adsorption systems associated with the emission unit(s) listed in the table below shall be in operation and control VOC emissions from the respective emission unit(s) at all times that the emission unit(s) are in operation:

Emission Unit(s)	Carbon Adsorption System
SDS Shredder	C14
Anaerobic Thermal Desorption System enclosed feed conveyor	C15
Oil-Water Separator	C16
Water Tank	C17
Distillation Unit	C19
Tank 55	C20
Tanks 52 through 54	C21
Pot Still	C33
SDS Shredder II	C37
F-01 and F-02	C39
Tanks 81 through 84	C40
Tank 85	C41
Tank 86	C42
Tank 87	C43

.....

D.1.712 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.813 Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

-
- (b) The Permittee shall monitor the pressure drop across baghouse BH3 at least once per day when the solids handling system, SHS, is in operation. When, for any one reading, the pressure drop across baghouse BH3 is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligations with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (bc) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months.

D.1.914 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.15 Flare Pilot Flame [40 CFR 64]

In order to assure compliance with Conditions D.1.1(b), D.1.1(c), D.1.3(a), D.1.3(b), D.1.3(c), D.1.9 and D.1.10, the Permittee shall continuously monitor the presence of the flare FL1 pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame. For the purpose of this condition, continuous means no less than once per minute.

D.1.16 Carbon Adsorber/Canister Monitoring

- (a) The Permittee shall conduct inspections, at least once per day, of each carbon adsorber/canister control system associated with the SDS and SDS II systems identified in Condition D.1.11(d) when the respective emission unit(s) is in operation. Inspections shall be made at both the inlet and outlet of the control system. The inspections shall be for the detection of VOC with a portable analyzer. If the inspections indicate that the outlet concentration of VOC is greater than or equal to two percent (2%) of the inlet concentration of VOC, then the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligations with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.4017 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.36 - Volatile Organic Compounds, the Permittee shall maintain the records specified in that condition.
- (b) To document the compliance status with Condition D.1.712 - Visible Emissions Notations, the Permittee shall maintain once per day records of the visible emission notations. The

Permittee shall include in its daily record when any of these records are not taken and the reason (e.g., the process did not operate that day).

- (c) To document the compliance status with Condition D.1.813 - Parametric Monitoring, the Permittee shall maintain once per day records of the baghouse pressure drop readings. The Permittee shall include in its daily record when any of these records are not taken and the reason (e.g., the process did not operate that day).
- (d) To document the compliance status with Condition D.1.4(a), the Permittee shall maintain records of the liquid material throughput of Unit 2R and Unit 2S each month and each compliance period.
- (e) To document the compliance status with Conditions D.1.1(b), D.1.1(c), D.1.3(a), D.1.3(b), D.1.3(c), D.1.9, D.1.10 and D.1.15, the Permittee shall maintain records in accordance with (1) through (9) below. Records maintained for (1) through (9) shall be taken monthly and shall be complete and sufficient to establish compliance with the emission limits and requirements established in Conditions D.1.1(b), D.1.1(c), D.1.3(a), D.1.3(b), D.1.3(c), D.1.9, D.1.10 and D.1.15.
 - (1) A copy of the manufacturer's operation and maintenance manual that defines operating procedures that will ensure destruction efficiency;
 - (2) The design specifications for the flare, and make such records available upon request to IDEM, OAQ and the U.S. EPA;
 - (3) Monthly records of flow rate to the flare as recorded by the flow meter, in either electronic or hard copy;
 - (4) Date and time when the Vapor Recovery Units (VRU and VRU II) were venting to the flare;
 - (5) The Permittee shall maintain monthly records in either electronic or hard copy to demonstrate the thermocouple or equivalent device detects the presence of a flame no less than once per minute on the flare when either of the Vapor Recovery Units (VRU or VRU II) were in operation;
 - (6) Measurements, engineering assessments, and calculations used to determine the monthly VOC emissions (before and after control) associated with each of the SDS and SDS II processes
 - (7) The VOC emissions (after control) for each month and each compliance period for the SDS and the SDS II; and
 - (8) The results from the most recent valid stack test for flare FL1.
- (f) To document the compliance status with Condition D.1.16, the Permittee shall maintain records of the inspections required under Condition D.1.16. The Permittee shall also maintain the following records:
 - (1) The normal carbon bed changeout frequency and any supporting information, including, but not limited to, performance test data, monitoring data, the carbon bed adsorption capacity, and pollutant loading;
 - (2) Carbon adsorber monitoring data, pollutant breakthrough data; and
 - (3) Date(s) of carbon bed changeout/replacement.
- (dg) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.18 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.3(a), D.1.4(a), D.1.9 and D.1.10 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION E.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

- (1) HWM mix, blend, and storage tanks, identified as 1R, 4, 18, 19, 20, 21, 22, and 23, with nominal gallon capacities of 12,600, 12,690, 20,353, 20,353, 19,688, 20,353, 20,353, and 20,353, respectively, constructed in 2008, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using three (3) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control (C1-C6), using a closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.
- (2) HWF receiving, blending and storage tank, identified as 29, with a capacity of 21,000 gallons, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control (C7-C8), using a closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 29.
- (3) HWF blending and mixing tanks, identified as 6 and 7, with gallon capacities of 4,386 and 2,900, respectively, constructed in 1989 and 1952, respectively, collectively using a flare (FL2) as primary VOC control and carbon canisters as backup VOC control (C9).
- (4) One (1) hydropulper tank, identified as Tank 24 HP, constructed in 1993, with a capacity of 3,500 gallons using one (1) carbon adsorber unit consisting of two (2) carbon canisters (C10-C11) and one (1) feed hopper using a separate carbon control system (C12).

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD, this unit is considered an affected facility.

- (b) Hazardous waste fuel (HWF), hazardous waste for tolling and organic liquid product receiving and shipping operations located at Area 2, Area 8 and the Rail line, including organic product receiving/shipping, identified as Unit 2R, with a maximum capacity of 17,200 gallons of liquid material per hour, and Unit 2S, with a maximum capacity of 13,200 gallons of liquid material per hour, constructed in 1991, and consisting of the following operations:

- (1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling;

(2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and at separate unenclosed areas, and using bottom filling; and

(3) Unloading of various sizes of drums and totes.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF, 40 CFR 63, Subpart DD and 40 CFR 63, Subpart EEEE, this unit is considered an affected facility.

(c) One (1) materials manual lab packing, depacking, and bulking operation, identified as Unit 4, with a maximum capacity of 27,375 pack containers per year, constructed in 1992, including three insignificant booths located in Area 5 in addition to the following equipment:

(1) One (1) booth for manual lab packing, depacking and bulking of organic materials, identified as Lab Pack Booth 1, using a single carbon canister for VOC control (C13), and exhausting to stack LP S1.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

(d) One (1) Solids Distillation System (SDS), constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

(1) One (1) SDS Shredder, approved for modification in 2013, using a variable speed fan and carbon adsorption system for VOC control (C14), exhausting to stacks SDS 01(a) and (b).

(2) One (1) Anaerobic Thermal Desorption System enclosed feed conveyor under nitrogen blanketing, and enclosed in a chilled jacket, using a carbon adsorption system for VOC control (C15), exhausting to SDS 03.

Under 40 CFR 63, Subpart DDDDD, the ATDU is considered an affected facility.

(3) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 15.6 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

(4) One (1) Oil-Water Separator, using a carbon adsorption system for VOC control (C16), exhausting to stack SDS 03.

(5) One (1) water tank, using a carbon adsorption system for VOC control (C17), exhausting to stack SDS 08.

(6) One (1) Vapor Recovery Unit (VRU), using an enclosed John Zink flare (FL1) with a demister (and a carbon adsorption system as backup (C18)) for VOC control, exhausting to stack SDS 07.

(7) One (1) solids shaker and conveyor system, using two (2) baghouses for particulate control (BH1-BH2), exhausting to stacks SDS 04 and SDS 09.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

(e) One (1) Distillation Unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system (C19), and exhausting to stack SDS 05.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart FFFF, this unit is considered an affected facility.

- (f) One (1) condensed liquid tank, identified as Tank 55, constructed in 2004, with a nominal capacity of 20,000 gallons, used to collect oil from the oil-water separator, controlled by a carbon Adsorption system (C20), and exhausting to stack SDS 08.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

- (g) Three (3) RCRA hazardous waste tanks, identified as Tanks 52 through 54, constructed in 2004, each with a nominal capacity of 12,000 gallons, controlled by a carbon adsorption system (C21), and exhausting to stack SDS 08.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

- (h) Five (5) product tanks, identified as Tanks 57 through 61, constructed in 1998, with nominal capacities of 20,000 gallons, 20,000 gallons, 6,000 gallons, 6,000 gallons and 20,000 gallons, respectively, each controlled by a carbon adsorption system containing two (2) carbon canisters (C22-C32), and exhausting to stacks LDS 09a-09e.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart EEEE, this unit is considered an affected facility.

- (i) One (1) Pot Still, constructed in 2007 and modified in 2015, with a maximum throughput rate of 70 gallons of liquid waste per hour, controlled by a carbon adsorption system (C33), and exhausting to stack SDS 10.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart FFFF, this unit is considered an affected facility.

- (j) One (1) Thin Film Evaporator, constructed in 2008, with a 2.4 million Btu/hr natural gas fired burner and a maximum throughput rate of 390 gallons of liquid waste per hour, controlled by a carbon adsorption system (C34), and exhausting to stack S11.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart FFFF, this unit is considered an affected facility.

- (k) Six (6) product tanks located in Area 1, identified as Tanks 62 through 67, permitted in 2008 with nominal capacities of 12,000 gallons per tank, controlled by a carbon adsorption system (C35), and exhausted to stacks S12-S17, respectively. Also included is a molecular sieve, installed in 2010.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

- (l) One (1) degassing operation, constructed in 2008 and approved in 2014 for modification, with a maximum degassing rate of 405.8 tons of gasses per year. The degassing operation includes a reactor tank into which gasses are vented and a pressurized "shock" tank that will condense gasses into liquids for collection and offsite shipment, with remaining gasses controlled by a flare (FL3) or carbon canisters (C36).**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

(m) One (1) Solids Distillation System, identified as SDS II, approved in 2015 for construction, with a maximum throughput rate of 5.0 tons of waste per hour, consisting of:

- (1) One (1) SDS Shredder and feed conveyor, identified as SDS Shredder II, with a processing capacity of 5.0 tons per hour, vented to a carbon adsorption system for VOC control (C37), exhausting to stack SDS II 01.**
- (2) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU II, with a maximum capacity of 32 MMBtu/hr, using natural gas, no control, exhausting to stack SDS II 02.**

Under 40 CFR 63, Subpart DDDDD, the ATDU II is considered an affected facility.

- (3) One (1) Vapor Recovery Unit, identified as VRU II, using a John Zink open flare (FL1) for control of non-condensable gases and a carbon adsorption system for backup VOC control (C38), exhausting to stack SDS 07.**
- (4) One (1) solids handling system, identified as SHS, vented to a baghouse for particulate control (BH3), with VOC/HAP emissions, exhausting to stack SDS II 04.**
- (5) One (1) Oil-Water Separator, identified as F-01, with a maximum of 22,000 gal, and one interceptor tank identified as F-02 with a maximum of 3,700 gal, associated with the VRU II, venting to a carbon adsorption system for VOC control (C39), exhausting to stack SDS II 03.**
- (6) Four (4) tanks, identified as Tank 81 through 84, each with a maximum of 12,000 gal, used to store liquid products venting to a common carbon adsorption system for VOC control (C40), exhausting to stack SDS II 08.**
- (7) One (1) tank, identified as Tank 85 used to store process water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C41), exhausting to stack SDS II 07.**
- (8) One (1) tank, identified as Tank 86 used to store process water/light sludge water, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C42), exhausting to stack SDS II 06.**
- (9) One (1) tank, identified as Tank 87 used to store oil/solvent, with a maximum of 22,000 gal, venting to a carbon adsorption system for VOC control (C43), exhausting to stack SDS II 06.**
- (10) One (1) insignificant cooling tower, identified as SDS II 13.**

Under 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 61, Subpart A] [326 IAC 14-1]

Pursuant to 40 CFR 61, the Permittee shall comply with the provisions of 40 CFR Part 61, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 14-1, for the above listed emissions units, except when otherwise specified in 40 CFR 61, 61, Subpart FF.

E.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Benzene Waste Operations [40 CFR 61, Subpart FF]

The Permittee shall comply with the following provisions of 40 CFR 61 Subpart FF (included as Attachment A to this permit), for the above listed emissions units:

- (1) 40 CFR 61.340;
- (2) 40 CFR 61.341;
- (3) 40 CFR 61.342;
- (4) 40 CFR 61.343;
- (5) 40 CFR 61.345;
- (6) 40 CFR 61.346;
- (7) 40 CFR 61.349;
- (8) 40 CFR 61.350;
- (9) 40 CFR 61.351;
- (10) 40 CFR 61.354(a), (d), (e) and (f);
- (11) 40 CFR 61.355;
- (12) 40 CFR 61.356; and
- (13) 40 CFR 61.357.

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Entire Source

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 61, Subpart A] [326 IAC 14-1]

Pursuant to 40 CFR 61, the Permittee shall comply with the provisions of 40 CFR Part 61, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 14-1, for the above listed emissions units, except when otherwise specified in 40 CFR 61, Subpart V.

E.3.2 Equipment Leaks (Fugitive Emission Sources) NESHAP Requirements [40 CFR 61, Subpart V] [326 IAC 14-8]

The Permittee shall comply with the following provisions of 40 CFR 61 Subpart V (included as Attachment B to this permit), which are incorporated by reference as 326 IAC 14-8, for the above listed emissions units:

- (1) 40 CFR 61.240
- (2) 40 CFR 61.241
- (3) 40 CFR 61.242-1
- (4) 40 CFR 61.242-2
- (5) 40 CFR 61.242-7
- (6) 40 CFR 61.242-8
- (7) 40 CFR 61.242-10

- (8) 40 CFR 61.242-11
- (9) 40 CFR 61.245
- (10) 40 CFR 61.246
- (11) 40 CFR 61.247

.....
SECTION E.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (d) One (1) Solids Distillation System (SDS), constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:
 - (3) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 15.6 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

Under 40 CFR 63, Subpart DDDDD, the ATDU is considered an affected facility.
- (m) One (1) Solids Distillation System, identified as SDS II, approved in 2015 for construction, with a maximum throughput rate of 5.0 tons of waste per hour, consisting of:
 - (2) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU II, with a maximum capacity of 32 MMBtu/hr, using natural gas, exhausting to stack SDS II 02.

Under 40 CFR 63, Subpart DDDDD, the ATDU II is considered an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)]**

E.5.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-1]

Pursuant to 40 CFR 63, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, for the ATDU II, except when otherwise specified in 40 CFR 63, Subpart DDDDD.

E.5.2 Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR 63, Subpart DDDDD] [326 IAC 20-95]

The Permittee shall comply with the following provisions of 40 CFR 63 Subpart DDDDD (included as Attachment E to this permit), which are incorporated by reference as 326 IAC 20-95 for the ATDU II:

ATDU:

- (19) 40 CFR 63.7485
- (20) 40 CFR 63.7490(a)(2) & (b)
- (21) 40 CFR 63.7495(b)
- (22) 40 CFR 63.7499(l)
- (23) 40 CFR 63.7500
- (24) 40 CFR 63.7505(a)
- (25) 40 CFR 63.7510(e)
- (26) 40 CFR 63.7515(d)

- (27) 40 CFR 63.7530(d), (e) and (f)
- (28) 40 CFR 63.7540(a)
- (29) 40 CFR 63.7545(a),(b) and (e)
- (30) 40 CFR 63.7550
- (31) 40 CFR 63.7555(a)
- (32) 40 CFR 63.7560
- (33) 40 CFR 63.7565
- (34) 40 CFR 63.7570
- (35) 40 CFR 63.7575

Table 3

.....

ATDU II:

- (1) 40 CFR 63.7485
- (2) 40 CFR 63.7490(a)(2) & (b)
- (3) 40 CFR 63.7495(a)
- (4) 40 CFR 63.7499(l)
- (5) 40 CFR 63.7500
- (6) 40 CFR 63.7505(a)
- (7) 40 CFR 63.7510(g)
- (8) 40 CFR 63.7515(d)
- (9) 40 CFR 63.7530(d), (e) and (f)
- (10) 40 CFR 63.7540(a)
- (11) 40 CFR 63.7545(c) and (e)
- (12) 40 CFR 63.7550
- (13) 40 CFR 63.7555(a)
- (14) 40 CFR 63.7560
- (15) 40 CFR 63.7565
- (16) 40 CFR 63.7570
- (17) 40 CFR 63.7575
- (18) Table 3

.....

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Quarterly Report

Source Name: Tradebe Treatment and Recycling LLC
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T 089-29424-00345
Facility: Vapor Recovery Unit (VRU) associated with SDS
Parameter: VOC emissions (after control)
Limit: VOC emissions (after control) from the Vapor Recovery Unit (VRU) shall not exceed 23.4 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall be determined using the equation contained in Condition D.1.10.

QUARTER: _____ **YEAR:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- ☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Quarterly Report

Source Name: Tradebe Treatment and Recycling LLC
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T 089-29424-00345
Facility: SDS II
Parameter: VOC emissions (after control)
Limit: VOC emissions after control from all the emission units associated with the SDS II shall be less than 95.6 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month

Compliance with this limit shall be determined using the equation contained in Condition D.1.9.

QUARTER: _____ **YEAR:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- ☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Other Changes

The changes listed below have been made to Part 70 Operating Permit No. T 089-29424-00345. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

.....

Change 4: Existing receiving/shipping Unit 2 has been separated into two units. In addition, the emission calculations for Unit 2 (now Unit 2R and 2S) have been corrected to indicate that the maximum capacities are 17,000 and 13,200 gallons per hour. As a result of the corrected calculations, the uncontrolled/unlimited potential to emit VOC is greater than 25 tons per year. The source has requested VOC limits on Units 2R and 2S of less than 25 tons per year in order to render the requirements of 326 IAC 8-1-6 not applicable to Unit 2R and Unit 2S. 326 IAC 8-1-6 avoidance limits have been added to the permit (This is a Title I change). The permit has been revised as follows:

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

.....

- (b) Hazardous waste fuel (HWF), hazardous waste for tolling and organic liquid product receiving and shipping operations located at Area 2, Area 8 and the Rail line, including organic product receiving/shipping, identified as Unit **2R**, with a maximum capacity of 17,200 gallons of liquid material per hour, **and Unit 2S, with a maximum capacity of 13,200 gallons of liquid material per hour**, constructed in 1991, and consisting of the following operations:
- (1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling;
 - (2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and at separate unenclosed areas, and using bottom filling; and
 - (3) Unloading of various sizes of drums and totes.

.....

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) Hazardous waste fuel (HWF), hazardous waste for tolling and organic liquid product receiving and shipping operations located at Area 2, Area 8 and the Rail line, including organic product receiving/shipping, identified as Unit **2R**, with a maximum capacity of 17,200 gallons of liquid material per hour, **and Unit 2S, with a maximum capacity of 13,200 gallons of liquid material per hour**, constructed in 1991, and consisting of the following operations:
- (1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling;
 - (2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and at separate unenclosed areas, and using bottom filling; and
 - (3) Unloading of various sizes of drums and totes.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

.....

D.1.4 VOC Limitation [326 IAC 8-1-6]

In order to render 326 IAC 8-1-6 (BACT) not applicable to Unit 2R and Unit 2S, Permittee shall comply with the following:

- (a) The throughput to Unit 2R and Unit 2S shall be less than 41,450,000 gallons of liquid material per twelve (12) consecutive month period, each, with compliance determined at the end of each month.**
- (b) Loading loss VOC emissions from Unit 2R and Unit 2S shall each not exceed 1.03 pounds of VOC per 1,000 gallons of liquid material throughput.**

Compliance with these limits shall limit the VOC emissions from Unit 2R and Unit 2S to less than 25 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 8-1-6 not applicable to Unit 2R and Unit 2S.

D.1.4015 Record Keeping Requirements

.....

- (d) To document the compliance status with Condition D.1.4(a), the Permittee shall maintain records of the liquid material throughput of Unit 2R and Unit 2S each month and each compliance period.**

.....

D.1.18 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.2(f), D.1.3(b), D.1.3(c) and **D.1.4(a)**, D.1.9 and D.1.10 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

.....

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Quarterly Report

Source Name: Tradebe Treatment and Recycling LLC
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T 089-29424-00345
Facility: Unit 2R
Parameter: Liquid Material Throughput
Limit: The throughput to Unit 2R shall be less than 41,450,000 gallons of liquid material per twelve (12) consecutive month period, each, with compliance determined at the end of each month.

QUARTER: _____ **YEAR:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- ☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Quarterly Report

Source Name: Tradebe Treatment and Recycling LLC
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T 089-29424-00345
Facility: Unit 2S
Parameter: Liquid Material Throughput
Limit: The throughput to Unit 2S shall be less than 41,450,000 gallons of liquid material per twelve (12) consecutive month period, each, with compliance determined at the end of each month.

QUARTER: _____ **YEAR:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- ☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

.....

Change 5: The existing emission unit SDS is not subject to 40 CFR Part 63, Subpart DD. Therefore, the permit has been clarified to reflect that this unit is not subject to this rule. However, this rule does still apply to the Hazardous waste material (HWM) tank storage, identified as Unit 1 and Hazardous waste fuel receiving/shipping, Unit 2R and Unit 2S. The requirements of 40 CFR Part 63, Subpart DD have been moved from E.1 to E.7. Also, the requirements of 40 CFR Part 63, Subpart FF have been moved to E.2.

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

.....

- (a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

.....

- (4) One (1) hydropulper tank, identified as Tank 24 HP, constructed in 1993, with a capacity of 3,500 gallons using one (1) carbon adsorber unit consisting of two (2) carbon canisters (C10-C11) and one (1) feed hopper using a separate carbon control system (C12).

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, ~~and 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD~~, this unit is considered an affected facility.

- (b) Hazardous waste fuel (HWF), hazardous waste for tolling and organic liquid product receiving and shipping operations located at Area 2, Area 8 and the Rail line, including organic product receiving/shipping, identified as Unit 2R, with a maximum capacity of 17,200 gallons of liquid material per hour, and Unit 2S, with a maximum capacity of 13,200 gallons of liquid material per hour, constructed in 1991, and consisting of the following operations:

.....

- (3) Unloading of various sizes of drums and totes.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF, **40 CFR 63, Subpart DD** and 40 CFR 63, Subpart EEEE, this unit is considered an affected facility.

.....

Note: The changes to A.2 were also made in D.1, E.2, E.4 and E.7.

~~E.1.1 General Provisions relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]~~

~~The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 63, Subpart DD.~~

~~E.1.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Offsite Waste and Recovery Operations [326 IAC 20-23] [40 CFR Part 63, Subpart DD]~~

~~Pursuant to 40 CFR 63 Subpart DD, the Permittee shall comply with the following provisions of 40 CFR 63 Subpart DD (included as Attachment B of this permit), which are incorporated by reference in 326 IAC 20-23, for the facilities described in this section:~~

- ~~(1) 40 CFR 63.680
(2) 40 CFR 63.681
(3) 40 CFR 63.683
(4) 40 CFR 63.684~~

- ~~(5) 40 CFR 63.685~~
- ~~(6) 40 CFR 63.686~~
- ~~(7) 40 CFR 63.687~~
- ~~(8) 40 CFR 63.688~~
- ~~(9) 40 CFR 63.689~~
- ~~(10) 40 CFR 63.690~~
- ~~(11) 40 CFR 63.691~~
- ~~(12) 40 CFR 63.693~~
- ~~(13) 40 CFR 63.694~~
- ~~(14) 40 CFR 63.695~~
- ~~(15) 40 CFR 63.696~~
- ~~(16) 40 CFR 63.697~~
- ~~(17) 40 CFR 63.698~~

~~E.1.3 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 61, Subpart A] [326 IAC 14-1]~~

~~The provisions of 40 CFR 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply source-wide except when otherwise specified in 40 CFR 61, Subpart FF.~~

~~E.1.4 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Benzene Waste Operations [40 CFR 61, Subpart FF]~~

~~Pursuant to 40 CFR 61 Subpart FF, the Permittee shall comply with the following provisions of 40 CFR 61 Subpart FF (included as Attachment A of this permit) for the facilities described in this section:~~

- ~~(1) 40 CFR 61.340;~~
- ~~(2) 40 CFR 61.341;~~
- ~~(3) 40 CFR 61.342;~~
- ~~(4) 40 CFR 61.343;~~
- ~~(5) 40 CFR 61.345;~~
- ~~(6) 40 CFR 61.346;~~
- ~~(7) 40 CFR 61.349;~~
- ~~(8) 40 CFR 61.350;~~
- ~~(9) 40 CFR 61.351;~~
- ~~(10) 40 CFR 61.354(a), (d), (e) and (f);~~
- ~~(11) 40 CFR 61.355;~~
- ~~(12) 40 CFR 61.356; and~~
- ~~(13) 40 CFR 61.357.~~

~~E.1.15 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 14-1] [40 CFR 61, Subpart A]~~

~~The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply to the source except when otherwise specified in 40 CFR 61, Subpart J.~~

~~E.1.26 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks from Fugitive Emission Sources of Benzene [326 IAC 14-7][40 CFR Part 61, Subpart J]~~

~~Pursuant to 40 CFR 61 Subpart J, the Permittee shall comply with the following provisions of 40 CFR 61 Subpart J (included as Attachment C of this permit), which are incorporated as 326 IAC 14-7 for the facilities described in this section:~~

- ~~(1) 40 CFR 61.110~~
- ~~(2) 40 CFR 61.246(i)~~

~~.....~~

SECTION E.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

- (1) HWM mix, blend, and storage tanks, identified as 1R, 4, 18, 19, 20, 21, 22, and 23, with nominal gallon capacities of 12,600, 12,690, 20,353, 20,353, 19,688, 20,353, 20,353, and 20,353, respectively, constructed in 2008, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using three (3) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control (C1-C6), using a closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.**
- (2) HWM receiving, blending and storage tank, identified as 29, with a capacity of 21,000 gallons, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control (C7-C8), using a closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 29.**
- (3) HWM blending and mixing tanks, identified as 6 and 7, with gallon capacities of 4,386 and 2,900, respectively, constructed in 1989 and 1952, respectively, collectively using a flare (FL2) as primary VOC control and carbon canisters as backup VOC control (C9).**
- (4) One (1) hydropulper tank, identified as Tank 24 HP, constructed in 1993, with a capacity of 3,500 gallons using one (1) carbon adsorber unit consisting of two (2) carbon canisters (C10-C11) and one (1) feed hopper using a separate carbon control system (C12).**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD, this unit is considered an affected facility.

(b) Hazardous waste fuel (HWF), hazardous waste for tolling and organic liquid product receiving and shipping operations located at Area 2, Area 8 and the Rail line, including organic product receiving/shipping, identified as Unit 2R, with a maximum capacity of 17,200 gallons of liquid material per hour, and Unit 2S, with a maximum capacity of 13,200 gallons of liquid material per hour, constructed in 1991, and consisting of the following operations:

- (1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling;**
- (2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and at separate unenclosed areas, and using bottom filling; and**
- (3) Unloading of various sizes of drums and totes.**

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF, 40 CFR 63, Subpart DD and 40 CFR 63, Subpart EEEE, this unit is considered an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

E.7.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-1]

Pursuant to 40 CFR 63, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, for the above listed emissions units, except when otherwise specified in 40 CFR 63, Subpart DD.

E.7.2 Off-Site Waste and Recovery Operations NESHAP [40 CFR 63, Subpart DD] [326 IAC 20-23]

The Permittee shall comply with the following provisions of 40 CFR 63 Subpart DD (included as Attachment H to this permit), which are incorporated by reference as 326 IAC 20-23 for the above listed emissions units:

- (1) 40 CFR 63.680
- (2) 40 CFR 63.681
- (3) 40 CFR 63.683
- (4) 40 CFR 63.684
- (5) 40 CFR 63.685
- (6) 40 CFR 63.686
- (7) 40 CFR 63.687
- (8) 40 CFR 63.688
- (9) 40 CFR 63.689
- (10) 40 CFR 63.690
- (11) 40 CFR 63.691
- (12) 40 CFR 63.693
- (13) 40 CFR 63.694
- (14) 40 CFR 63.695
- (15) 40 CFR 63.696
- (16) 40 CFR 63.697
- (17) 40 CFR 63.698

.....

Change 6: The requirements of 40 CFR 63, Subpart EEEE are being added to the permit.

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) Hazardous waste fuel (HWF), hazardous waste for tolling and organic liquid product receiving and shipping operations located at Area 2, Area 8 and the Rail line, including organic product receiving/shipping, identified as Unit 2R, with a maximum capacity of 17,200 gallons of liquid material per hour, and Unit 2S, with a maximum capacity of 13,200 gallons of liquid material per hour, constructed in 1991, and consisting of the following operations:

- (1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling;
- (2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and at separate unenclosed areas, and using bottom filling; and
- (3) Unloading of various sizes of drums and totes.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF, 40 CFR 63, Subpart DD and 40 CFR 63, Subpart EEEE, this unit is considered an affected

facility.

- (h) Five (5) product tanks, identified as Tanks 57 through 61, constructed in 1998, with nominal capacities of 20,000 gallons, 20,000 gallons, 6,000 gallons, 6,000 gallons and 20,000 gallons, respectively, each controlled by a carbon adsorption system containing two (2) carbon canisters (C22-C32), and exhausting to stacks LDS 09a-09e.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V, 40 CFR 61, Subpart FF and 40 CFR 63, Subpart EEEE, this unit is considered an affected facility.

- (k) Six (6) product tanks located in Area 1, identified as Tanks 62 through 67, permitted in 2008 with nominal capacities of 12,000 gallons per tank, controlled by a carbon adsorption system (C35), and exhausted to stacks S12-S17, respectively. Also included is a molecular sieve, installed in 2010.

Under 40 CFR 61, Subpart J, 40 CFR 61, Subpart V and 40 CFR 61, Subpart FF, this unit is considered an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-1]

Pursuant to 40 CFR 63, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, for the above listed emissions units, except when otherwise specified in 40 CFR 63, Subpart EEEE.

E.4.2 Organic Liquids Distribution (Non-Gasoline) NESHAP [40 CFR 63, Subpart EEEE] [326 IAC 20-83]

The Permittee shall comply with the following provisions of 40 CFR 63 Subpart EEEE (included as Attachment D to this permit), which are incorporated by reference as 326 IAC 20-83 for tanks 57 through 67 and Unit 2R and Unit 2S:

- (1) 40 CFR 63.2330
- (2) 40 CFR 63.2334(a)
- (3) 40 CFR 63.2338
- (4) 40 CFR 63.2342(a) & (d)
- (5) 40 CFR 63.2343(b)
- (6) 40 CFR 63.2346(a),(b),(c),(d)&(i)
- (7) 40 CFR 63.2350
- (8) 40 CFR 63.2354
- (9) 40 CFR 63.2358
- (10) 40 CFR 63.2362
- (11) 40 CFR 63.2366
- (12) 40 CFR 63.2370
- (13) 40 CFR 63.2374
- (14) 40 CFR 63.2378
- (15) 40 CFR 63.2382
- (16) 40 CFR 63.2386
- (17) 40 CFR 63.2390
- (18) 40 CFR 63.2394
- (19) 40 CFR 63.2396
- (20) 40 CFR 63.2398